

CD RECEIVER

KDC-M7024 KDC-MP822

SERVICE MANUAL

KENWOOD

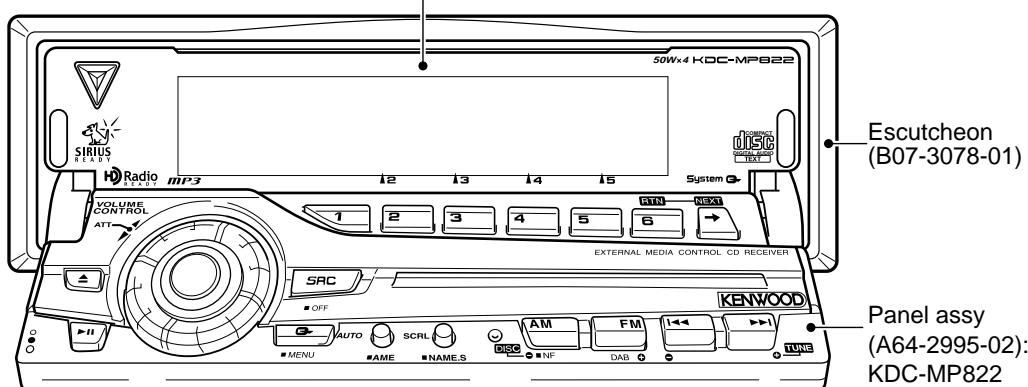
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B53-0035-00 (N) 3114

CD mechanism operation description is
not in this service manual.

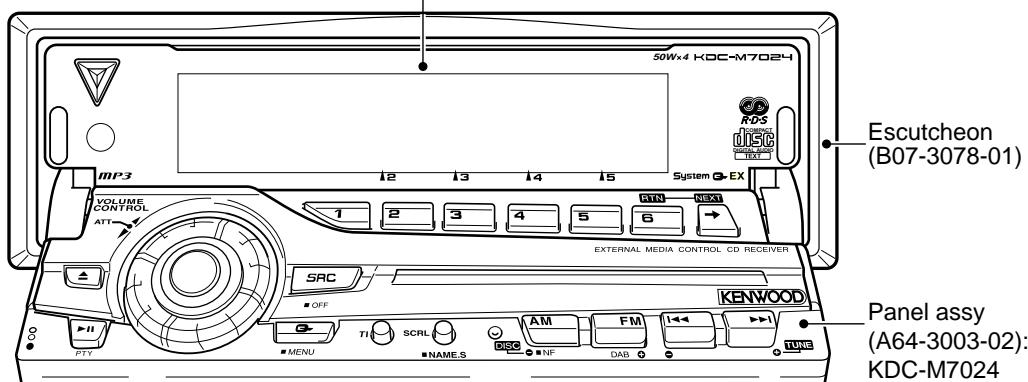
Please, refer to service manual X92-
4030-0x (B51-7867-00).

CD mechanism extension cord : W05-0935-00

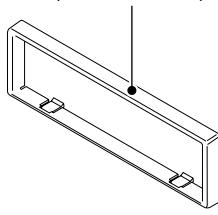
Panel assy
(A64-2978-01): KDC-MP822



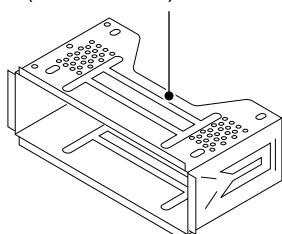
Panel assy
(A64-2986-01): KDC-M7024



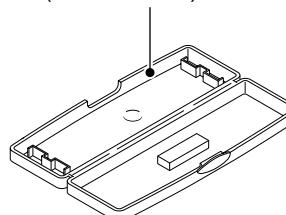
Escutcheon
(B07-3078-01)



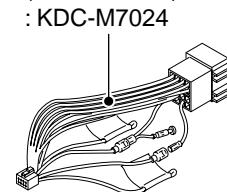
Mounting hardware assy
(J21-9823-03)



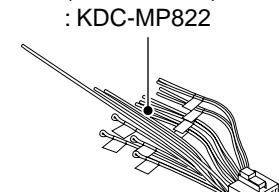
Plastic cabinet assy
(A02-2731-03)



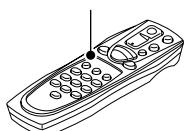
DC cord (ISO)
(E30-4942-05)
: KDC-M7024



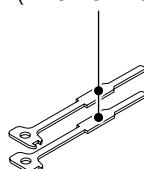
DC cord
(E30-6106-05)
: KDC-MP822



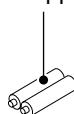
Remote controller assy
(RC-505)
(A70-2040-05)
: KDC-MP822



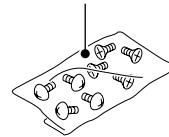
Lever
(D10-4674-04) x 2



Size AA battery
(Not supplied)



Screw set
(N99-1723-05)
: KDC-MP822



Screw set
(N99-1734-05)



Antenna adaptor
(T90-0552-05)
: KDC-M7024



HOW TO THE PANEL MECHANISM ASSEMBLY

1. Fixed the position of operation side

(Fixed the horizontal position when the panel opened)

- ① The mounting hardware (281) of operation side is rotation (A) into the stop position with close side.
- ② As figure (B) line is just above and the gear (230) attached to pin.

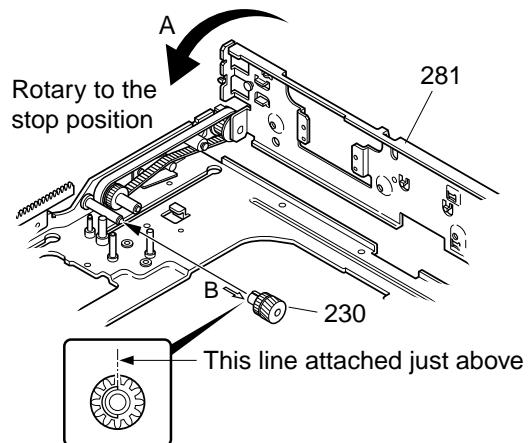
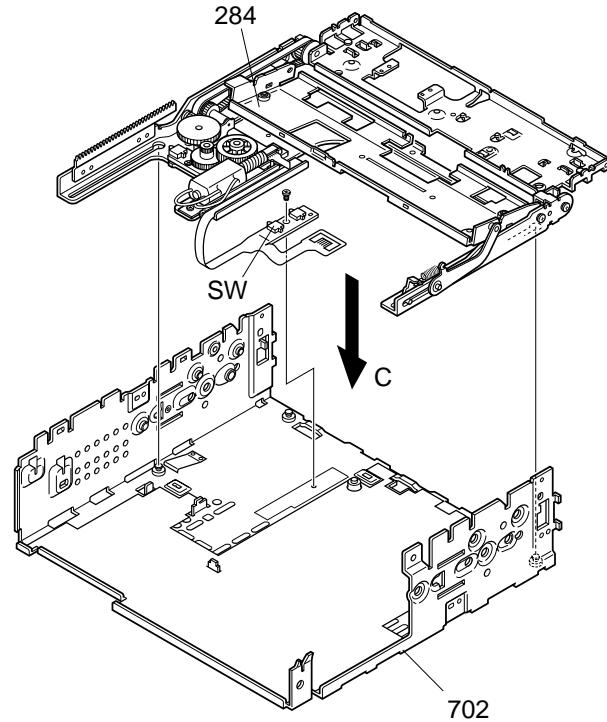


Fig. B

(This figure from look at B arrow)

2. The slider assembly insert to bottom chassis

- ① The bracket for display panel (284) is leave down, insert to the chassis (702). (C)

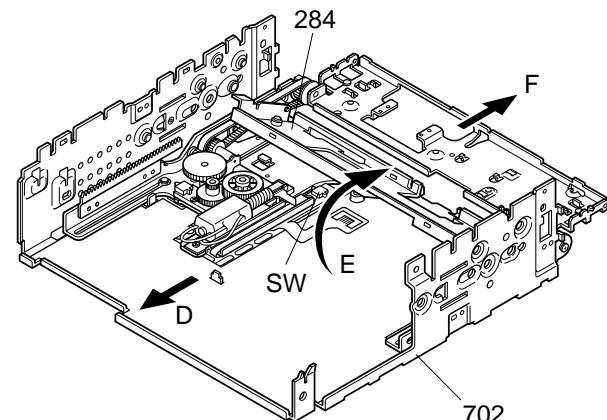


- ② The slider assembly insert to the chassis (702) after that shift (D) direction.

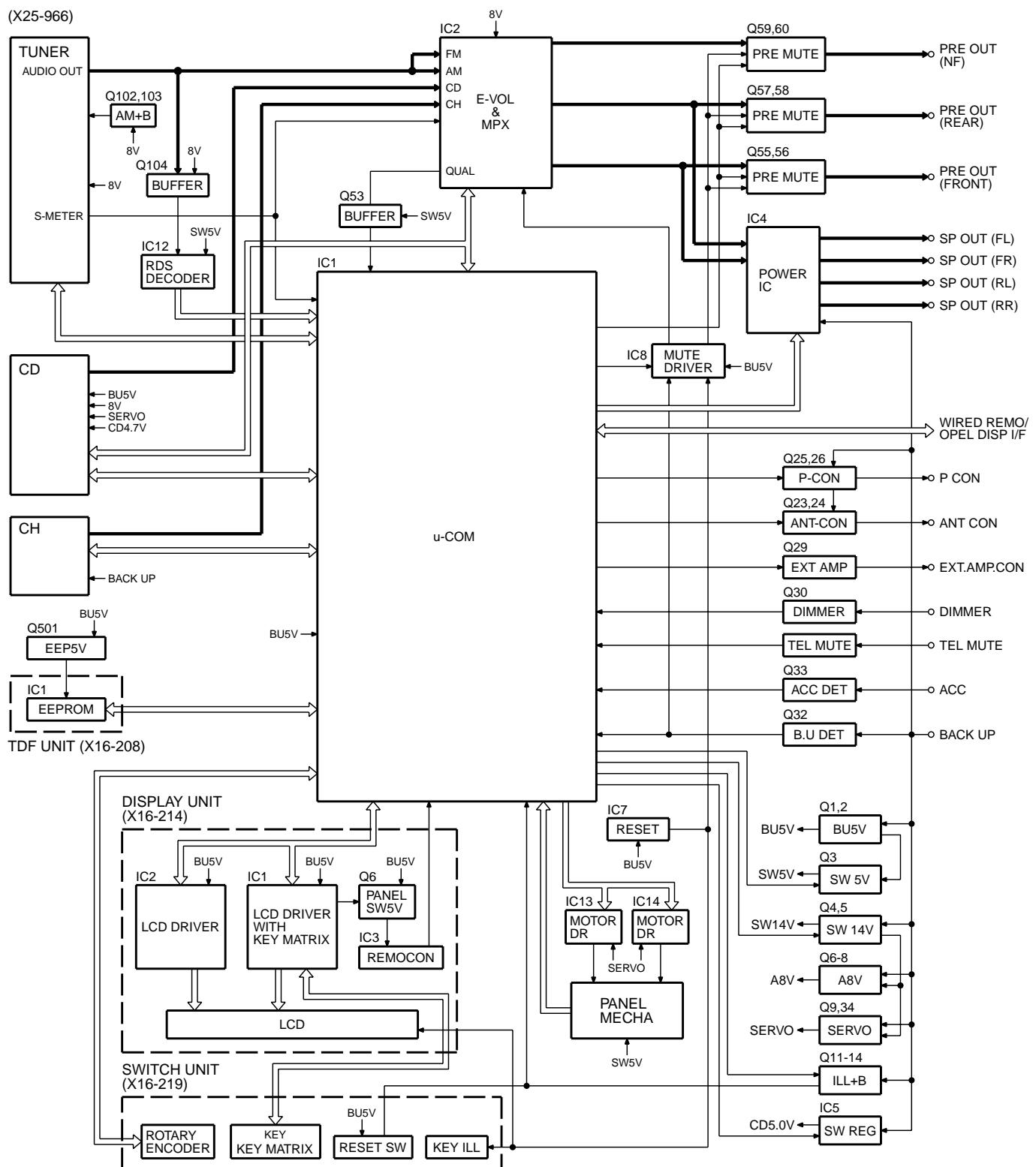
- ③ The bracket for display panel (284) is raised (E) direction.

- ④ Keep the raising conditions, the slider assembly is shift (F) direction.

(Note) Do not bend the knob of chassis detection switch when the slider assembly insert.



BLOCK DIAGRAM



COMPONENTS DESCRIPTION

● SUB-CIRCUIT UNIT (X16-2080-10)

Ref. No.	Application/Function	Operation/Condition/Compatibility
IC1	E2PROM	For security

● SUB-CIRCUIT UNIT (X16-2140-10)

Ref. No.	Application/Function	Operation/Condition/Compatibility
IC1	LCD driver	KEY Input
IC2	LCD driver	
IC3	Remote control sensor	
Q1	KEY scan start SW	ON when the base goes "L".
Q5, D26	VLCD AVR	
Q6	Remote control sensor power supply SW	ON when the base goes "L".
Q11	Dimmer control	LCD back light control. OFF when the base goes "L", ON when the base goes "H".

● SWITCH UNIT (X16-2190-10)

Ref. No.	Application/Function	Operation/Condition/Compatibility
Q1	DSI (Disabled System Indicator)	DSI blinks when the base goes "H/L"
Q2	KEY illumination SW (GREEN)	ON (KEY illumination green) when the base goes "H"
Q3	KEY illumination SW (RED)	ON (KEY illumination red) when the base goes "H"

● ELECTRIC UNIT (X25-966x-xx)

Ref. No.	Application/Function	Operation/Condition/Compatibility
IC1	System μ -com	
IC2	E-vol & N.C. & MPX	
IC3	Regulator IC for A8V	
IC4	Power IC	
IC5	Switching regulator IC for CD5V	
IC7	Reset IC	
IC8	Logic IC for muting	
IC12	RDS decoder IC	
IC13, 14	Motor driver IC for panel mechanism	
IC15	ROM IC	For ROM correction.
Q1, 2	B.U.5V AVR	While BU is applied, BU5V AVR outputs +5V.
Q3	SW5V	When Q3'base goes Lo, SW5V outputs +5V.
Q4, 5	SW14V	When Q5'base goes Hi, SW14V outputs 14V.
Q6~8	AUDIO 8V AVR	When Q6'base goes Hi, A8V AVR outputs 8.4V.
Q9, 34	SERVO+B AVR	When Q34'base goes Hi, S+B AVR outputs 7.4V.
Q10	SW for IC5	When Q10'base goes Hi, Q10 is turned on.
Q11~14	ILL+B AVR	When Q11'base goes Hi, AVR outputs 10.5V.
Q23, 24	P-ANT SW	When Q23'base goes Hi, P-ANT SW outputs 14V.
Q25, 26	P-CON SW	When Q26'base goes Hi, P-CON SW outputs 14V.
Q27, 28	P-CON protection	Protect Q27 by turning on when P-CON output is grounded.
Q29	Ex Amp control buffer	
Q30	Small lamp det SW	When Q30'base goes Hi, Q30 is turned on.
Q32	BU det	When Q32'base goes Hi, Q32 is turned on.
Q33	ACC det	When Q33'base goes Hi, Q33 is turned on.
Q51, 52	Mute driver	When a base goes Lo, mute driver is turned on.

COMPONENTS DESCRIPTION

Ref. No.	Application/Function	Operation/Condition/Compatibility
Q53	Noise buffer	
Q54	E-vol mute SW	When a base gose Hi, mute SW is turned on.
Q55~60	Pre-out mute SW	When a base gose Hi, Pre-out is muted.
Q63	E2P 5V SW	When Q63'base gose Lo, E2P 5V is out.
Q102, 103	AM+B SW	When Q102'base gose Hi, AM+B is out.
Q104	Composite signal buffer for RDS	

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROCOMPUTER : UPD703030GC014 (X25-966 : IC1)

Pin No.	Pin Name	I/O	Module	Purpose / Description	Truth table	Processing Operation
1	PLL_DATA	I/O	Tuner	Data output/input with F/E.		
2	AM+B	I/O	Power supply	AM+B.		AM operation : H
3	(FM+B)	O	Power supply	FM+B (S01 F/E only).		FM operation : H, Last FM : H (With RDS, RBDS model)
4	V_ILL PAN_E2P DATA	I/O	To panel	V-ILL D/A converter (V-ILL, LCD), E2PROM data.		
5	V_ILL PAN_E2P CLK	I/O	To panel	V-ILL D/A converter (V-ILL, LCD), E2PROM clock.		
6	EVDD	-				
7	EVSS	-				
8	AFS	O	Tuner	Noise detection time constant switching.		FM seek, AF search : L, Receiving : H, Auto 0 : L
9	BEEP	O	Audio	Beep output.		
10	REMO	I	Extra	Remote control input (Panel, External display).		
11	P_MUTE	O	Audio	Power IC MUTE output.		Power OFF : L, All OFF : L, TEL mute : L
12	(SVR)	O	Audio	Power IC SVR discharge circuit control.		Power OFF momentary power dropped : H (5 second) and then L
13	IC2_SDA	I/O	CD	CD mechanism data line.		
			Audio	IC2 data line.		
			Extra	ROM correction data line.		
14	IC2_CLK	I/O	CD	CD mechanism clock line.		
			Audio	IC2 clock line.		
			Extra	ROM correction clock line.		
15	P_STBY	O	Audio	Power IC STBY output.		Power IC ON : H, Power IC OFF : L, All OFF : H
16	P_CON	I/O	Extra	Power control.		Power ON : H, Power OFF : Hi-Z, All OFF : Hi-Z
17	DIMMER_CONT	O	To panel	Dimmer control (W-LED only).		Dimmer : Pulse control, Frequency : 1kHz, Normally : H
18	TEST	-				Connect to GND.
19	NC	O	Extra	NC (MP3 mechanism model).	②	Output : L
20	MUTE	O	Audio	Mute output.		ON : OPEN, OFF : L
21	PRE_MUTEL	O	Audio	PREOUT (L ch) mute.		M MUTE L is L : L (CD), Momentary power dropped : L, 2 zone, NAVI interrupt : Fixed H
22	PRE_MUTER	O	Audio	PREOUT (R ch) mute.		M MUTE R is L : L (CD), Momentary power dropped : L, 2 zone, NAVI interrupt : Fixed H

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Module	Purpose / Description	Truth table	Processing Operation
23	BU_DET	I	Extra	Momentary power dropped detection.		Backup : L, No backup, momentary power dropped : H
24	ACC_DET	I	Extra	ACC detection.		With ACC : L, Without ACC : H
25	SW5V	I/O	Power supply	5V power supply.		ON : L, OFF : Hi-Z
26	EXT_AMP_CONT	O	Extra	External amplifier control.		Refer to external amplifier control.
	NC	O		NC (Without EXT_AMP_CONT model)		Output : L
27	DIMMER	I	Extra	Small lamp detection.		ON : L, OFF : H
28	ANT_CON	O	Extra	Antenna control.	②	Tuner ON : H, Other source With RDS last FM : H, Other source with RDBS TI ON last FM : H
29	P_ON	I/O	Power supply	SW 14V, SW 5V control, AD reference voltage control output.		Power ON : H, Power OFF : Hi-Z
30	ILL_ON	I/O	Power supply	FL, illumination output.		ON : H, OFF : Hi-Z
31	RESET	-				
32	XT1	-		Sub clock.		32.768kHz
33	XT2	-		Sub clock.		32.768kHz
34	REGC	-				Connect to 1μF capacitor.
35	X2	-		Main clock.		20MHz
36	X1	-		Main clock.		20MHz
37	VSS	-				
38	VDD	-				
39	CLKOUT	-				
40	LX_REQ_M	O	LX	Communication request to external slave.		Request : L
41	LX_MUTE	I	LX	Mute request from external slave.		Mute ON : H
42	LX_CON	O	LX	External slave select.		ON : H, OFF : L
43	LX_RST	O	LX	Reset output to external slave μ-com.		Normally : L, After system reset : H (400ms or more) and then L
44	CD_MECHA+B	I/O	Power supply	DC 5.0V output.		CD source : H, Except CD source : L, ON : Fast 50ms than M_STOP, OFF : Slow 50ms than M_STOP
45	TYPE0	I	Extra	Destination select.	②	
46	TYPE1	I	Extra	Destination select.	②	
47	IC2_TYPE0	I	Extra	IC2 destination.	②	
48	IC2_TYPE1	I	Extra	IC2 destination.	②	
49	NC	O		NC		Output : L
50	E2P5V	I/O	Power supply	E2PROM, DA converter power supply control.		ON : L, OFF : Hi-Z
51	DSI	I/O	To panel	DSI control.		ON : L, OFF : Hi-Z
52	L_CE	O	To panel	Chip enable output to LCD driver.		
53	L_INH	O	To panel	Inhibit signal output to LCD driver.		Normally : H, Reset, momentary power dropped : L
54	VOL A	I	To panel	VOL input.		
55	BVDD	-				
56	BVSS	-				
57	VOL B	I	To panel	VOL input.		
58	M_RST	O	CD	Reset output to CD mechanism.		Normally : H, Reset : L (Per mechanism control)
59	M_STOP	O	CD	Stop request to CD mechanism.		Stop : L, CD : H
60	CD_SW3	I	CD	DC down switch detection.		Chucking : H
61	LO/EJ	I/O	CD	CD mechanism loading/eject switch.		Stop, brake : Hi-Z, Loading : L, Eject : H
62	MOSW	O	CD	CD mechanism motor driver switch.		Loading, eject, brake : H

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Module	Purpose / Description	Truth table	Processing Operation
63	FPM MOTOR B	O	P-mecha	FPM mechanism (Slider) control.	(3)	
64	FPM MOTOR F	O	P-mecha	FPM mechanism (Slider) control.	(3)	
65	FPM MOTOR O	O	P-mecha	FPM mechanism (Angle) control.	(3)	
66	FPM MOTOR C	O	P-mecha	FPM mechanism (Angle) control.	(3)	
67	O_DATA	I/O	Extra	External display data input/output.		External display
	NC	O		NC (Without external display model)		Output : L
68	O_CLK	I/O	Extra	External display clock input/output.		External display
	NC	O		NC (Without external display model)		Output : L
69	O_CE	I/O	Extra	External display chip enable input/output.		External display
	NC	O		NC (Without external display model)		Output : L
70	M_MUTER	I	CD	Mute request form CD mechanism. (R ch).		ON : L (CD)
71	AVDD	-				
72	AVSS	-				
73	AVREF	-		Connect to P_ON (29 pin).		
74	M_MUTEL	I	CD	Mute request form CD mechanism. (L ch).		ON : L (CD)
75	PAN_DET	I	To panel	Panel E2PROM detection.		With : L, Without : H
76	PHONE	I	Extra	PHONE detection.		TEL mute : 1V or less, NAVI mute : 2.5V or more, J type 1V or less, 2.5V or more : NAVI mute
	NC	I		NC (Without TEL-MUTE model)		Connect to GND.
77	FPM SW4	I	P-mecha	FPM mechanism position detection, mechanism detection.	(3)	3.75V or more : No mechanism, 1.25V or more : H, Less than 1.25V : L
78	FPM SW1	I	P-mecha	FPM mechanism position detection.	(3)	
79	FPM SW2	I	P-mecha	FPM mechanism position detection.	(3)	
80	FPM SW3	I	P-mecha	FPM mechanism position detection.	(3)	
81	FPM PHOUT	I	P-mecha	FPM mechanism position detection.	(3)	H : 2.2V or more
82	S_METER	I	Tuner	S-meter detection.		Refer to S03 F/E control.
83	NOISE	I	Tuner	FM noise detection.		Refer to S03 F/E control.
84	IFC_OUT	I	Tuner	F/E IFC OUT input.		With station : 2.5V or more, refer to S03 F/E control.
85	NC (POWER_DET)	I	Extra	Power IC DC offset detection.		03 model not used. Connect to GND.
86	NC	O		NC (Except J type)		Output : L
87	R_CLK	I	Tuner	RDS decoder clock input.		
	NC	I		NC (Without RDS, RBDS model)		Connect to GND.
88	LX_REQ_S	I	LX	Receive request from external slave.		Request : L
89	KEY_REQ	I	To panel	Communication request from LCD driver		
90	CD_SW1	I	CD	Loading switch detection.		Loading start power off : L
91	CD_SW2	I	CD	12cm disc detection switch.		12cm disc power off : L
92	R_QUAL	I	Tuner	RDS decoder QUAL input.		
	NC	I		NC (Without RDS, RBDS model)		Connect to GND.
93	R_DATA	I	Tuner	RDS decoder data input.		
	NC	I		NC (Without RDS, RBDS model)		Connect to GND.
94	LX_DATA_S	I	LX	Data input from external slave.		
95	LX_DATA_M	O	LX	Data output to external slave.		
96	LX_CLK	I/O	LX	Clock input/output with external slave.		
97	L_DATAL	I	To panel	Data input from LCD driver.		
98	L_DATAS	O	To panel	Data output to LCD driver.		
99	L_CLK	O	To panel	Clock output to LCD driver.		
100	PLL_CLK	I/O	Tuner	Clock input/output with F/E.		

KDC-M7024/MP822

MICROCOMPUTER'S TERMINAL DESCRIPTION

Truth table

② Destination port

MODEL	Destination	DISPLAY	TYPE2	TYPE1	TYPE0
KDC-X969	K	FL	0	0	0
KDC-MP922	K	FL	0	0	1
FX-9000	J	FL	0	1	0
KDC-PSW9524	E	FL	1	0	0
KDC-9023R	M (E)	FL	1	0	1
KDC-X869	K	FL	0	1	1
KDC-8024	E	FL	-	-	-
KDC-MP822	K	LCD	-	0	0
KDC-M7024	E	LCD	-	0	1
FX-5000	J	LCD	-	1	0
KDC-V7022	K	LCD	0	0	0
KDC-X769	K	LCD	0	0	1
KDC-722	K	LCD	0	1	0
KDC-7024	E	LCD	0	1	1
KDC-7024Y					
KDC-8023	M (K)	LCD	1	0	0

Note : When FL model using TYPE2, K & J type (with ANT_CON model) : L, E type (without ANT_CON model) : H

Destination(IC2)

	TYPE0	TYPE1
Market model	L	L
Market model CRSC modification	L	H
OEM model CRSC modification	H	L
OEM model CRSC and de-emphasis modification	H	H

③ FPM MOTOR

Slide		FPM mechanism operation
FPM MOTOR B	FPM MOTOR F	
0	0	Standby
1	0	Backward operation
0	1	Forward operation
1	1	Brake

Angle		FPM mechanism operation
FPM MOTOR O	FPM MOTOR C	
0	0	Standby
1	0	Angle open direction
0	1	Angle close direction
1	1	Brake

MICROCOMPUTER'S TERMINAL DESCRIPTION

● MECHANISM MICROCOMPUTER : 703033BYGC-J02 (X32-541 : IC7)

Pin No.	Pin Name	I/O	Use	Processing Operation	STBY Processing
1	NC	O	Not used.	Fixed Low	Low
2	E2P_SCL	O	ROM correction E2P IC2 clock.		Hi-Z
3~5	NC	O	Not used.	Fixed Low	Low
6	VDD	-	5V		
7	GND	-	GND		
8, 9	NC	O	Not used.	Fixed Low	Low
10	PON	O	Power ON/OFF control.	H : ON, L : OFF	Low
11	/PON	O	Power ON/OFF control.	H : OFF, L : ON	High
12	LOE/LIM_SW	I	Down limit switch detection.	L : Most Inner position detection	Hi-Z
13	8EjE_SW	I	Not used.	Fixed Low	Hi-Z
14	LOS_SW	I	Not used.	Fixed Low	Hi-Z
15	12EjE_SW	I	Not used.	Fixed Low	Hi-Z
16, 17	NC	O	Not used.	Fixed Low	Low
18	IC/Vpp	-	Write voltage (Flash).		-
19	MUTE_L	O	L ch audio mute control.	L : Mute ON, H : Mute OFF	Low
20	MUTE_R	O	R ch audio mute control.	L : Mute ON, H : Mute OFF	Low
21~25	NC	O	Not used.	Fixed Low	Low
26	EFLG	I	WMA error detection.	H : Error, L : No error	Hi-Z
27	WAIT	I	Wait control signal detection.		Hi-Z
28	FOK	I	Focus condition detection.	H : Focus OK, L : Focus NG	Hi-Z
29, 30	NC	O	Not used.	Fixed Low	Low
31	RESET	I	Reset detection.	H : Normal, L : Reset	Hi-Z
32	XT1	I	Not used.		Hi-Z
33	XT2	-	Not used.		-
34	REGC	-			
35	X2	-			
36	X1	I			Hi-Z
37	Vss	-	GND		
38	VDD	-	5V		
39	NC	O	NC	Output stop.	Low
40	WRL	O	Multiplex WRITE signal.	_LBEN : 61002 (Not used), _WRL : 63760	Out-Low
41	NC	O	Not used.	Fixed Low	Low
42	R/W	O	Multiplex _R/W signal	_R/W : 61002, _WRH : 63760 (Not used)	Out-Low
43	DSTB, RD	O	Multiplex DSTB or RD signal	_DSTB : 61002, _RD : 63760	Out-Low
44	ASTB	O	Multiplex ASTB signal		Out-Low
45, 46	NC	O	Not used.	Fixed Low	Low
47~54	AD0~AD7	I/O	Multiplex address/data		Out-Low
55	BVdd	-	Bus interface power supply.		

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Use	Processing Operation	STBY Processing
56	BVss	-	Bus interface GND.		
57~64	AD8~AD15	I/O	Multiplex data/address		Out-Low
65	/HCSB	O	Chip select control.	H : OFF, L : ON	Low
66	/CS	O	Chip select control.	H : OFF, L : ON	Low
67	DSP RESET	O	DSP reset control.	H : Normal. L : Reset	Low
68	REQ	I	Data transfer request input.		Hi-Z
69	DBBWRDY0	I	DBB00 register write permission input.		Hi-Z
70	DBBRRDY0	I	DBB00 register read permission input.		Hi-Z
71	Avdd	-			
72	Avss	-			
73	Avref	I	A/D port reference voltage input.		
74	WTS	I	WMA table select.	H : WMA8 table, L : WMA9 table	Hi-Z
75	MDL_SEL	I	Model port changeover.	H : 03 model, L : 02 model	Hi-Z
76, 77	NC	I	Not used.	Fixed Low	Hi-Z
78	HOT	I	Temperature rise detection.	Detection voltage : 4V, Reset voltage 3.9V	Hi-Z
79	NC	I	Not used.	Fixed Low	Hi-Z
80	WMA	I	WMA correspond changeover.	H : DXM6500 (With WMA), L : DXM6400 (Without WMA)	Hi-Z
81	NC	I	Not used.		Hi-Z
82	ASEL	I	Audio output pole changeover.	H : Invert output, L : Normal output	Hi-Z
83	DASC	I	Shock proof changeover.	H : Shock proof OFF, L : Shock proof ON	Hi-Z
84	E2P_WR	I	E2PROM write changeover.	H : E2PROM write, L : Normal	Hi-Z
85	PIC_SEL	I	PICK UP changeover.	H : KPC6C, L : KSS710	Hi-Z
86	NC	O	Not used.	Fixed Low	Low
87	MSTOP	I	Standby restart interrupt.	H : Standby, L: Stop	Hi-Z (Low input)
88	INTSV	I	Servo IC interrupt.	H : Interrupt	Hi-Z
89	FOGUP	I	Focus gain up interrupt.	H : Focus gain up, L : Normal	Hi-Z
90	ZMUTE_R	I	0 bit mute detection.	H : Mute ON, L : Mute OFF	Hi-Z
91	ZMUTE_L	I	0 bit mute detection.	H : Mute ON, L : Mute OFF	Hi-Z
92	NC	O	Not used.	Fixed Low	Low
93	D-MUTE	O	Driver mute.	H : OFF, L : ON	Low
94	SYS_SDA	I/O	System μ -com I2C data.		Hi-Z
95	NC	O	Not used.	Fixed Low	Low
96	SYS_SCL	I/O	System μ -com I2C clock.		Hi-Z
97~99	NC	O	Not used.	Fixed Low	Low
100	E2P_SDA	O	ROM correction E2P I2C data.		Hi-Z

TEST MODE

● How to enter the test mode

While pressing and holding the Preset 1 and Preset 3 keys, reset the unit.

● How to exit from the test mode

While holding the Preset 6 key, reset the unit.

(Note) The test mode cannot be terminated by reset the unit, ACC OFF, power OFF and Panel detached, momentary power down.

● Initial status in the test mode

- Sources : ALL OFF
- Display : All segments are lit.
- Volume : -10 dB (displayed as "30")
- Loudness : OFF
- CRSC : OFF regardless of the presence of switching function.
- SYSTEM Q : Flat
- WOW : All OFF
- BEEP : When pressing any keys, the buzzer generates a beep at any time.
- AUX : ON
- MENU SYSTEM Q : OFF
- Variable model : Default is white
- Multifunction : Source dependency (Preset, SCAN, etc.)

● Special display in Tuner mode

When any of the following messages is displayed in Tuner mode, the F/E may be abnormal.

- "TNE2P NG" : The EEPROM is set to the default (unstable values) because the F/E was shipped without passing through the adjustment process, etc.
- "TNCON NG" : Communication with the F/E is not possible.

● Forced switching of K3I

Each press of the Preset 6 key in Tuner mode should switch K3I from AUTO → Forced Wide → Forced Middle → Forced Narrow → AUTO.

The initial status is AUTO and the display shows these modes as follows.

- AUTO : FMA
- Forced Wide : FMW
- Forced Middle : FMM
- Forced Narrow : FMN

● Test mode specifications of the CD receiver

- Forced ejection is inhibited in the reset start operation. When the unit is reset while a CD is loaded in it, the CD is not recognized by resetting.
- Each press of the Track Up key jumps to the following track numbers:
No. 9 → No. 15 → No. 10 → No. 11 → No. 12 → No. 13 → No. 22 → No. 14 → No. 9 (The cycle restarts from here.)
- Each press of the Track Down key jumps to the previous track number to the track being played.
- When the number of total tracks of the MP3 disc or the WMA disc is less than 9, 1st track is played.
- When the disc media is CD, A short press of the Preset 1 key jumps to the track number 28.
- When the model is equipped the CD mechanism assembly adapted for MP3 or MP3/WMA disc, the mechanism name and version number are displayed during the FL model is lower stand and Display mode of LCD model is DNPS.

● Audio-related specifications

- Pressing the * key on the remote initiates the audio adjustment mode.
- BL/F key on the Fader initials.
- Continuous holding of a remote control key is inhibited, and workings are short press of any keys.
- Bass, Middle and Treble are adjusted in 3 steps of -8 / 0 / +8 with the Track Up/Down keys (Default value at 0).
- Balance is adjusted in 3 steps of L15 / 0 / R15 with the Track Up/Down keys (Default value at 0).
- Fader is adjusted in 3 steps of R15 / 0 / F15 with the Track Up/Down keys (Default value at 0).
- HPF is adjusted in 2 steps of OFF / 170Hz (or 220Hz) with the Track Up/Down keys (Default value at OFF).
- LPF is adjusted in 2 steps of OFF / 120Hz with the Track Up/Down keys (Default value at OFF).
- Bass f, Bass Q, Bass EXT, Middle f, Middle Q and Treble f are not dealt with by the audio adjust.
- The WOW key pass during the audio adjustment as following steps.

Order	Mod.			Display
	TruBass	FOCUS	SRS	
①	OFF	OFF	OFF	SRS WOW OFF
②	ON	OFF	OFF	SRS TruBass ON
③	OFF	LOW	OFF	FOCUS LOW
④	OFF	HIGH	OFF	FOCUS HIGH
⑤	OFF	OFF	ON	SRS ON
⑥	ON	HIGH	ON	SRS WOW HIGH

TEST MODE

● **Menu-related specifications**

- A short press of the Q key initiates the menu mode.
- Pressing the DNPP key on the remote initiates the Menu mode.
- Continuous holding of a remote control key is inhibited, and workings are short press of any keys.
- Contrast is adjusted in 3 steps of 0 / 5 / 10 with the Track Up/Down keys (Default value at 5).

● **Backup current measurement**

When the unit is reset while ACC is OFF (i.e. by turning Backup ON), the MUTE terminal goes OFF in 2 seconds in place of 15 second. (The CD mechanism is not activated at this time.)

● **Special display when the display is all on**

Pressing the Preset keys while the power is ALL OFF displays the following information.

[PRESET 1]	Version display (8 digits, Month/Day/Hour/Minute) (Display) SYS xxxxxxxx : System microcomputer PAN xxxxxxxx : FL model only MEM xxxxxxxx : 4 contrasts FL model only
[PRESET 2]	Serial number display (8 digits) (Display) SNo xxxxxxxx
[PRESET 3]	Short press : View power ON time. (The All OFF period is not counted.) 2 seconds long press/hold : Clear power ON time at the power ON time displaying. (Display) PonTim xxxx Max. 60000 (hours)
[PRESET 4]	Short press : Display CD operation time. 2 seconds long press/hold : Clear CD operation time at the CD operation time displaying. (Display) CDTim xxxx Max. 60000 (hours)
[PRESET 5]	Short press : Display CD ejection count. 2 seconds long press/hold : Clear CD ejection count at the CD ejection count displaying. (Display) EjeCnt xxxx Max. 60000 (times)
[PRESET 6]	Short press : Display Panel open/close count. 2 seconds long press/hold : Clear Panel open/close count at the Panel open/close count. (Display) PnCnt xxxx Max. 600000 (times)
FM key	Display ROM collection version. (Display) ROM R xxx Invalid : "R ---"
AM key	Display panel E2PROM condition. (Display) P-ROM OK (Registered code) P-ROM NG (Code is write in error) P-ROM WAIT (Unregistered code) P-ROM NON (Panel security nonfunctional)

● **Panel mechanism**

- Auto-panel close inhibition when set-in the CD.
- The panel operation inhibition at power ON/OFF and ACC ON/OFF.
- The panel position changing Eject ↔ Last with a short press of the PLAY/PAUSE keys.

● **Other specifications**

- No displays such as "CODE OFF/ON" during Power-ON.
- The LINE MUTE inhibition time is one second from 10 seconds when start-up the test mode.
- Do not write the security code with the security jig on the test mode.
- Do not write the serial with the serial writing jig on the test mode.
- OEM display output is not stop if OEM display not connection on the test mode.

● **Switching the frequency span (K/M type)**

While holding the Preset 1 key and Preset 5 key, reset the unit.

● **Response to OEM setting****(Destination of electronic volume setting)**

S03F/E models are response to OEM models option at put in μ-com 2 pin.

Its setting are following steps.

IC2 TYPE0 (47 pin)	IC2 TYPE1 (48 pin)	Description
Low	Low	① Trade model (Initial quantify)
Low	High	② Trade model (CRSC change)
High	Low	③ OEM model-ready CRSC change
High	High	④ OEM model-ready CRSC & de-emphasis change

● **Security-related information****1. Forced Power ON mode (All models)**

Even when the security (Cord) is approved, resetting the unit while holding the Q and Preset 4 keys makes it possible to turn the power ON for 30 minutes.

After 30 minutes have elapsed, it is not possible to return to the previous condition unless the unit is reset again. (Security code is do not clear at this mode. Put the power on fill-in.)

TEST MODE

2. Method of registration of the security code after EEPROM (F/E) replacement (Code security model)

- 1) Enter the test mode. (See How to enter the test mode)
- 2) Press the MENU key to enter the Menu mode.
- 3) When the message "Security" is displayed, press and hold the Track Up/Down key for 1 second to enter the security registration mode.
- 4) Enter the code using the FM/AM/Track Up/Track Down keys.
 FM key : Number up
 AM key : Number down
 Track Up key : Cursor right shift
 Track Down key : Cursor left shift
- 5) Hold down the Track Up key for at least 3 seconds and the message, "RE-ENTER" appears, so once again enter the code according to Step 4 above.
- 6) Press and hold the Track Up key for 3 seconds until "AP-PROVED" is displayed.
- 7) Exit from the test mode. (See 2. How to exit from the test mode)
 (Note 1) All Clear is not applicable to the security code of this model.
 (Note 2) When the F/E changed, need re-inscription because the panel security is clear.

3. Simple way to clear the security code (K type only)

- 1) During code request mode, press the Track UP key for at least 3 seconds while holding down the AUTO key. (---- will disappear)
- 2) Enter, "KCAR" with the remote controller as described below.
 - Press the remote controller 5 key twice, and press the Track Up key. (Enters a "K")
 - Press the remote controller 2 key three times, and press the Track Up key. (Enters a "C")
 - Press the remote controller 2 key once, and press the Track Up key. (Enters an "A")
 - Press the remote controller 7 key twice, and press the Track Up key. (Enters an "R")
- 3) Security function is canceled and unit sets to All-Off mode.
- 4) Code request mode appears if a mistake was made in entering the numbers.

4. How to inscription the panel security code

- 1) Enter the test mode.
- 2) Pressing the AM key on all lighting, check the "P-ROM WAIT" display.
- 3) The NEXT key is long press 2 seconds, writing the code.
- 4) Display is "P-ROM OK".
- 5) Exit from the test mode.

(Note) E2PROM connection is NG when display is "P-ROM NG", so detach the panel and rewrite after the display is "P-ROM WAIT". This code can not clear.

● Check the SRAM

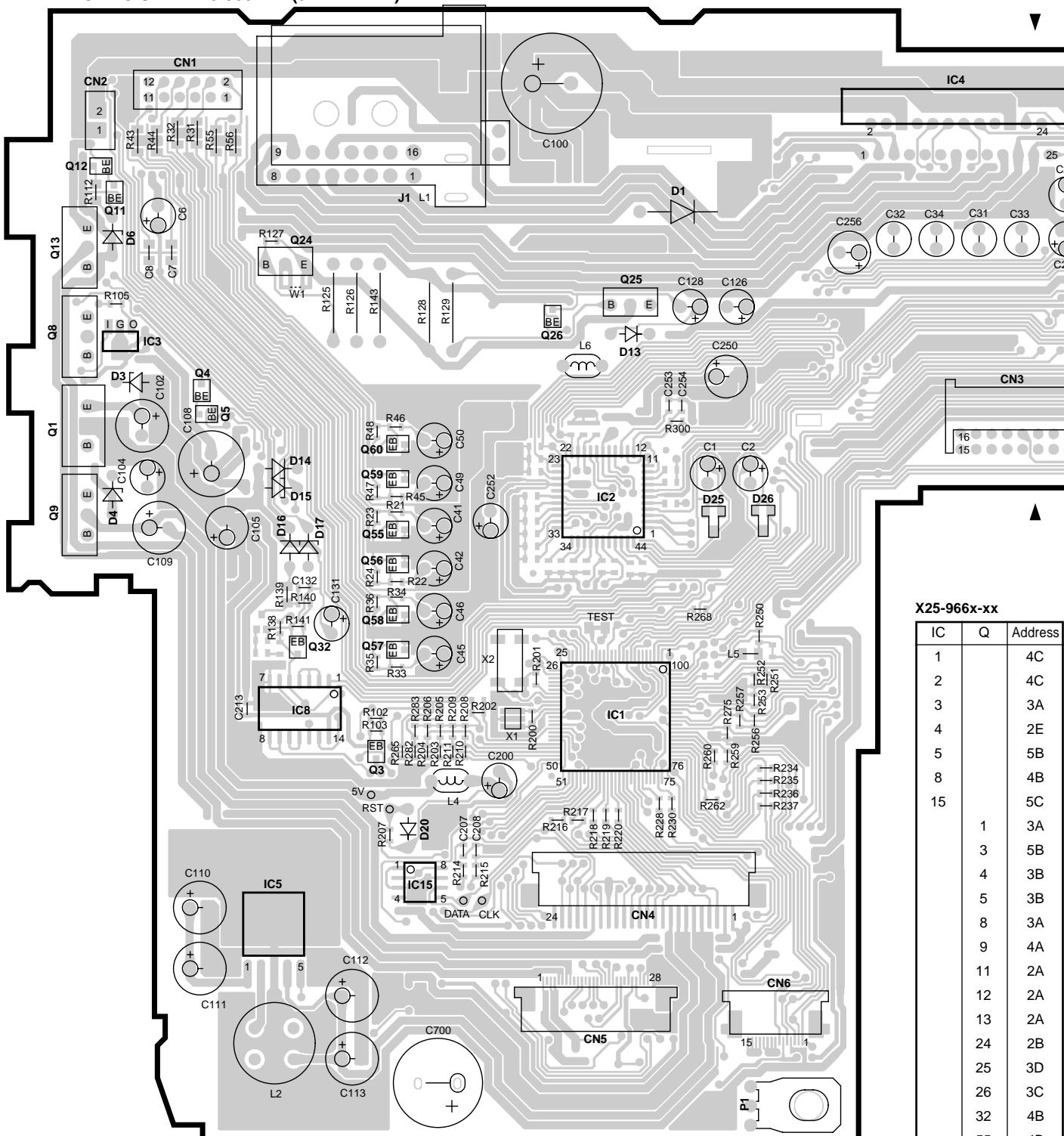
Output (Hi) to the SRAM_CHECK terminal on 101 pin when SRAM is function properly on the panel of 4 gradation FL models.

● Check the Flash ROM

- 1) Display to the following effect at ALL OFF by assortment system computer and panel for cover the customization model attach the panel with no Flash ROM.
 - Customization system computer + Flash ROM panel : All lighting
 - Non customization system computer + Non Flash ROM panel : All lighting
 - Customization system computer + Non Flash ROM panel : Panel NG
 - Non customization system computer + Flash ROM panel : Panel NG
- 2) Output (Hi) to the FLASHROM_CHECK terminal on 102 pin when Flash ROM is function properly.
- 3) Flash ROM data is initialized when pressing the AM key long hold at all lighting.
 Display is "Data Erase" in data erasing mode. Do not touch anything this mode. When the data erase completed, display is "Erase OK!!".
 If display is "Erase NG!!!!!!", Flash ROM data unable erase for some kind or another factors.
 When same effect as pressing the AM key long hold and data erase once again, Flash ROM is defective.

PC BOARD (COMPONENT SIDE VIEW)

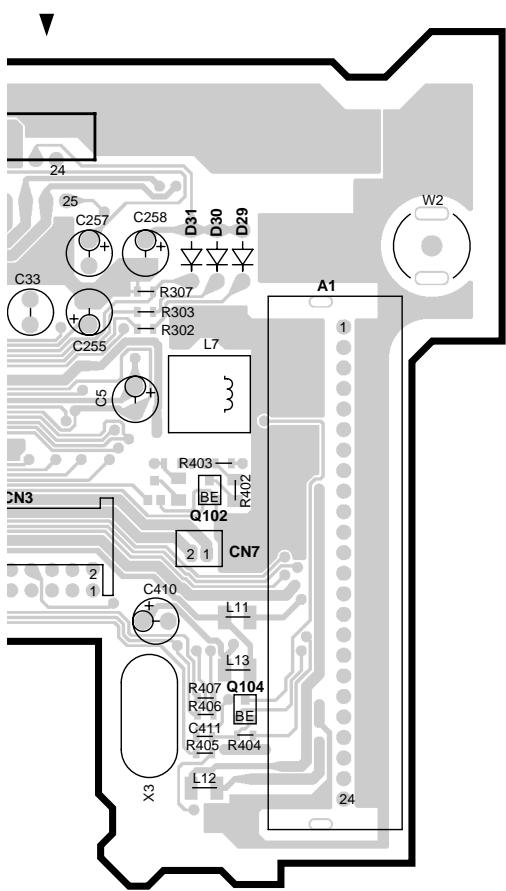
ELECTRIC UNIT X25-966x-xx (J74-1474-12)



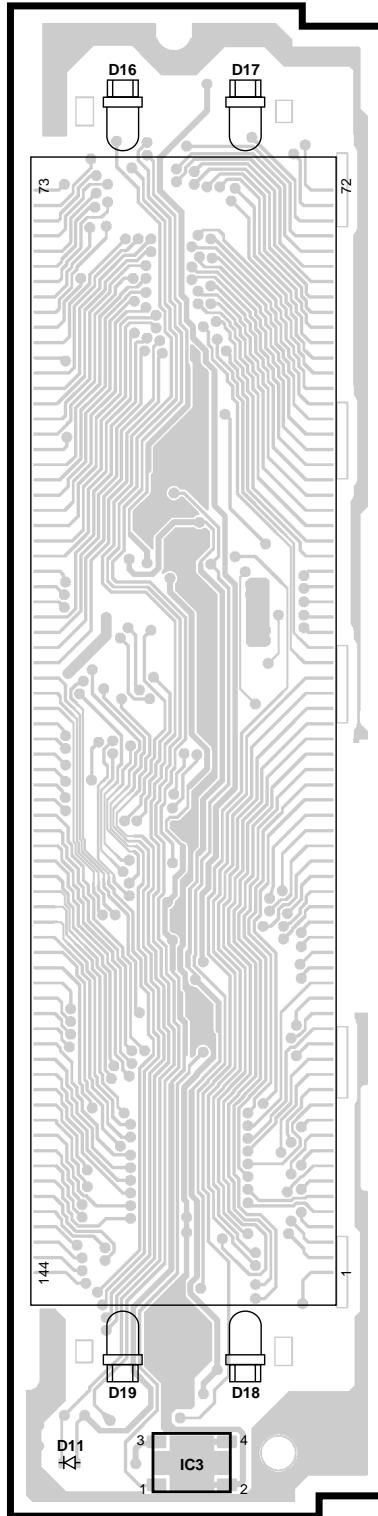
X25-966x-xx

IC	Q	Address
1		4C
2		4C
3		3A
4		2E
5		5B
8		4B
15		5C
	1	3A
	3	5B
	4	3B
	5	3B
	8	3A
	9	4A
	11	2A
	12	2A
	13	2A
	24	2B
	25	3D
	26	3C
	32	4B
	55	4B
	56	4B
	57	4B
	58	4B
	59	3B
	60	3F
	102	3F
	104	4F

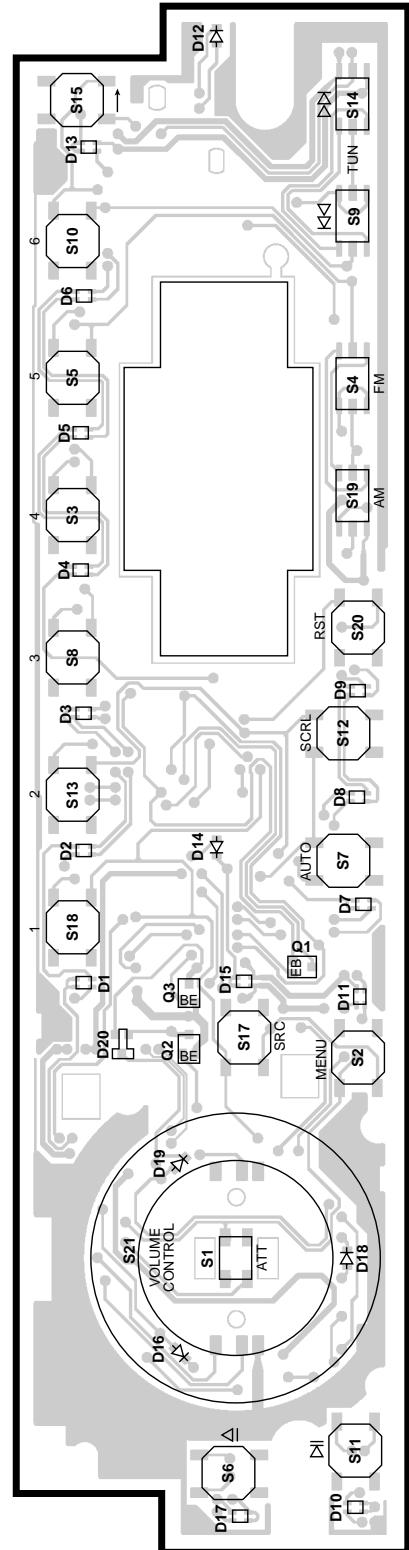
Refer to the schematic diagram for the values of resistors and capacitors.



SUB-CIRCUIT UNIT
X16-2140-10 (J74-1479-02)



SWITCH UNIT
X16-2190-10 (J74-1484-12)



X16-2140-10

IC	Address
3	6H

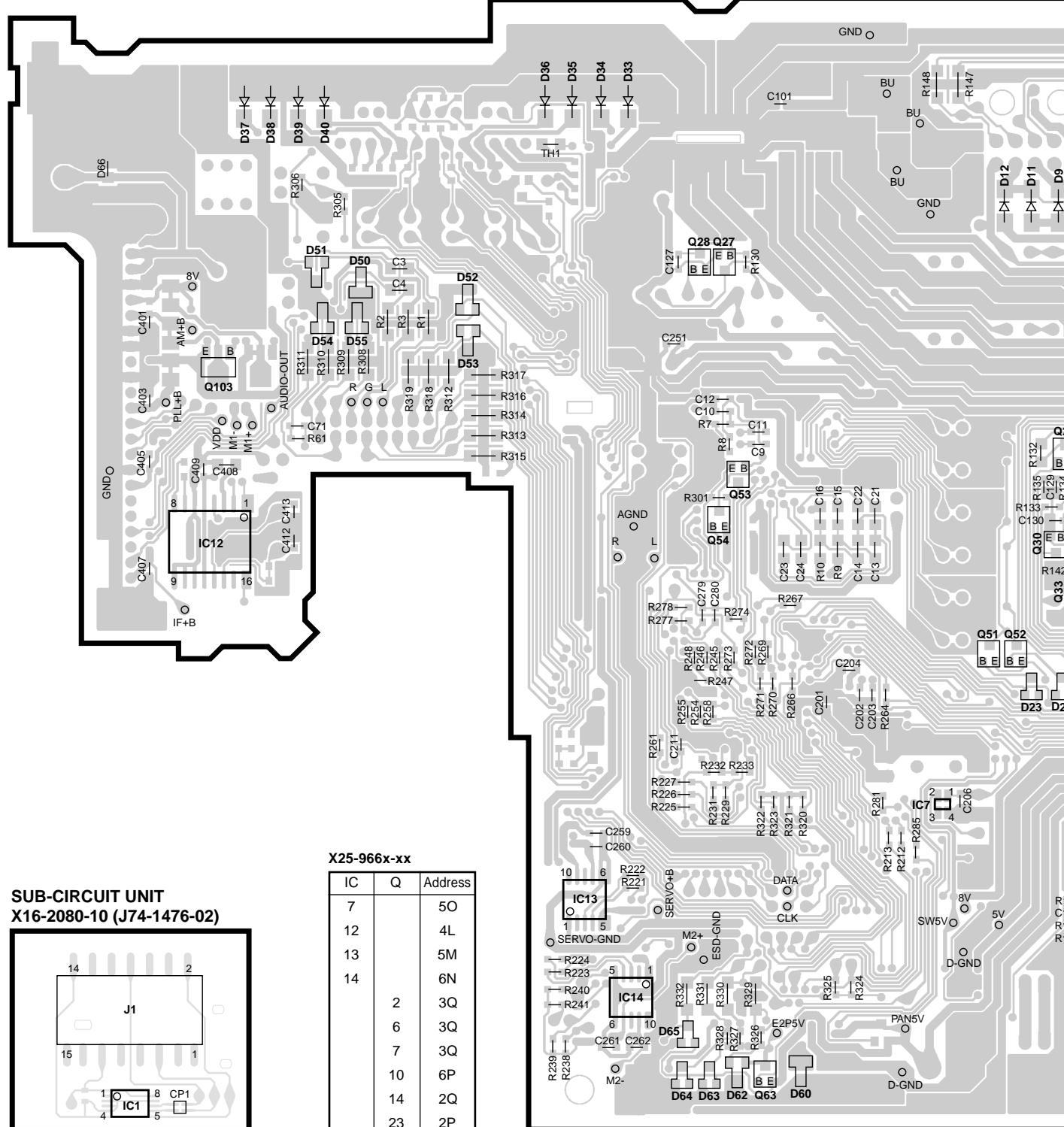
X16-2190-10

Q	Address
1	5J
2	5I
3	5I

KDC-M7024/MP822

PC BOARD (FOIL SIDE VIEW)

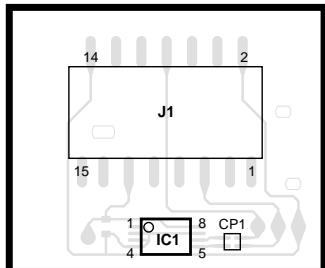
ELECTRIC UNIT X25-966x-xx (J74-1474-12)



X25-966x-xx

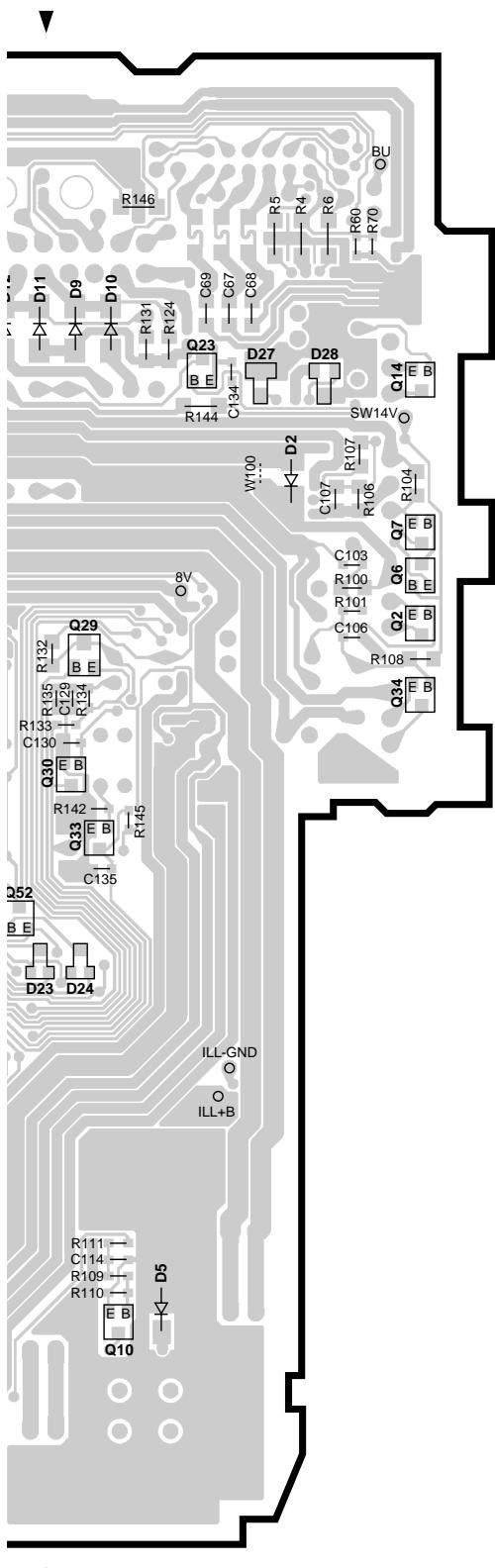
IC	Q	Address
7		5O
12		4L
13		5M
14		6N
	2	3Q
	6	3Q
	7	3Q
	10	6P
	14	2Q
	23	2P
	27	2N
	28	2N
	29	3P
	30	4P
	33	4P
	34	4Q
	51	4O

SUB-CIRCUIT UNIT
X16-2080-10 (J74-1476-02)

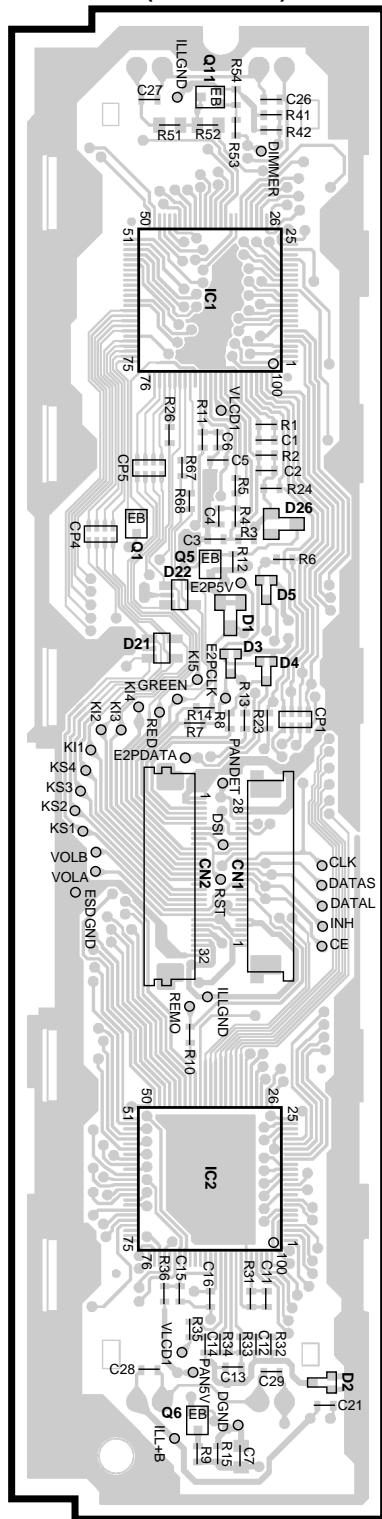


X16-2080-10

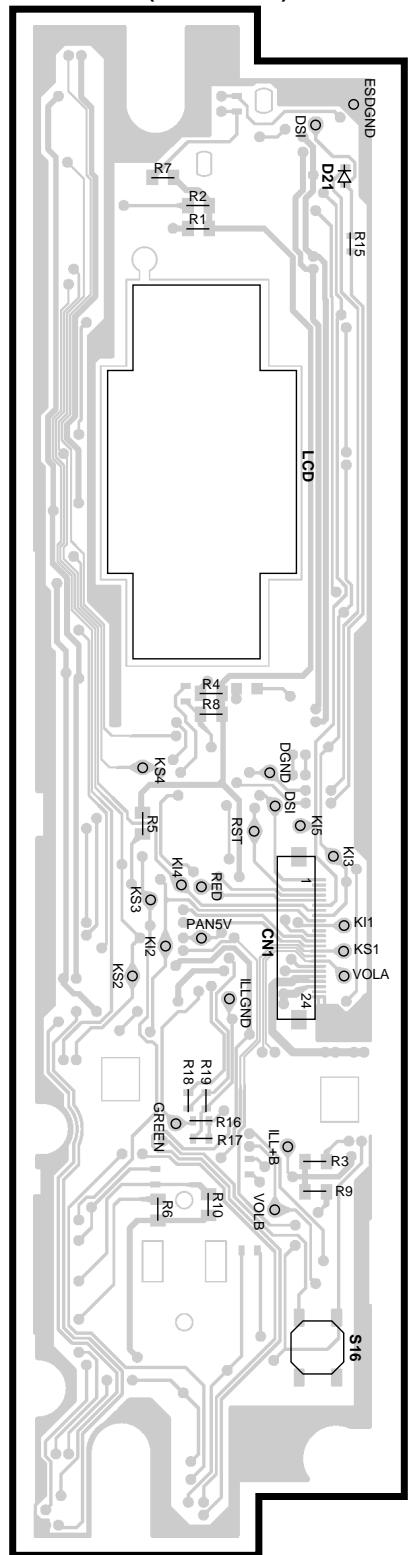
IC	Address
1	6K



SUB-CIRCUIT UNIT
X16-2140-10 (J74-1479-02)



SWITCH UNIT
X16-2190-10 (J74-1484-12)



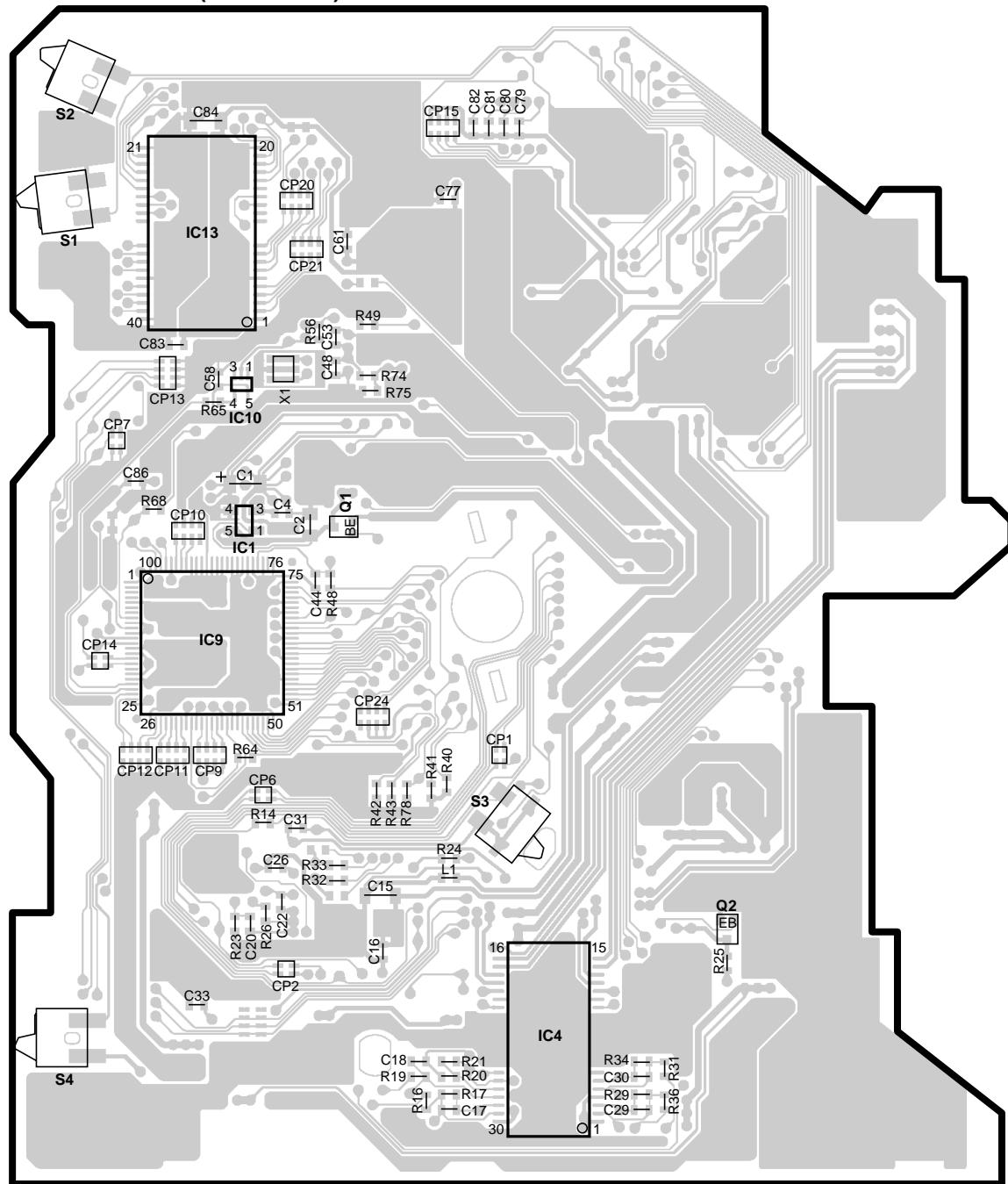
Refer to the schematic diagram for the values of resistors and capacitors.

X16-2140-10

IC	Q	Address	IC	Q	Address
1		2R		5	3R
2		5R		6	6R
	1	3R		11	2R

PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT
X32-5410-00 (J74-1487-12)



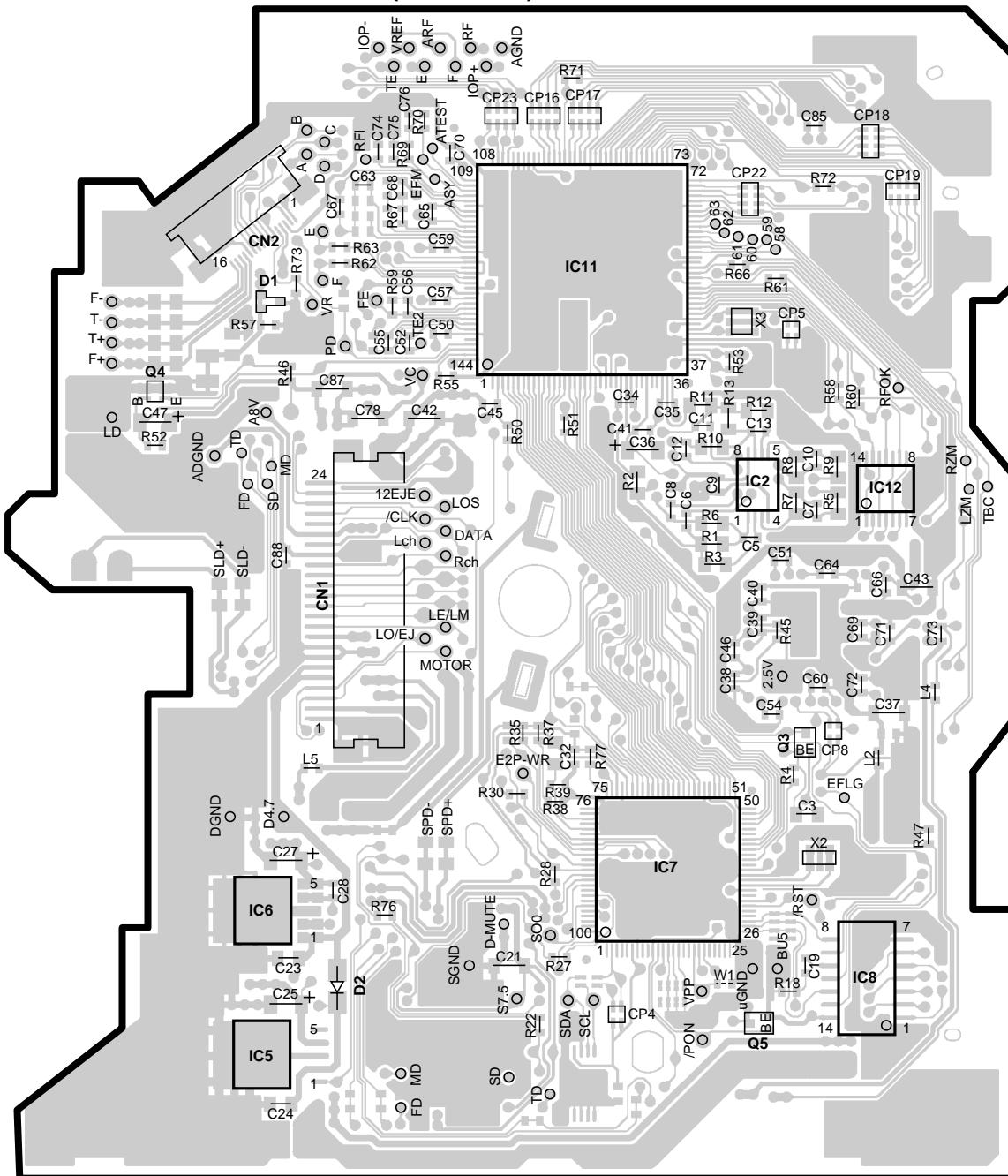
X32-5410-00

IC	Q	Address
1		3V
4		5W
13	1	2V
	2	3W
		5X

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

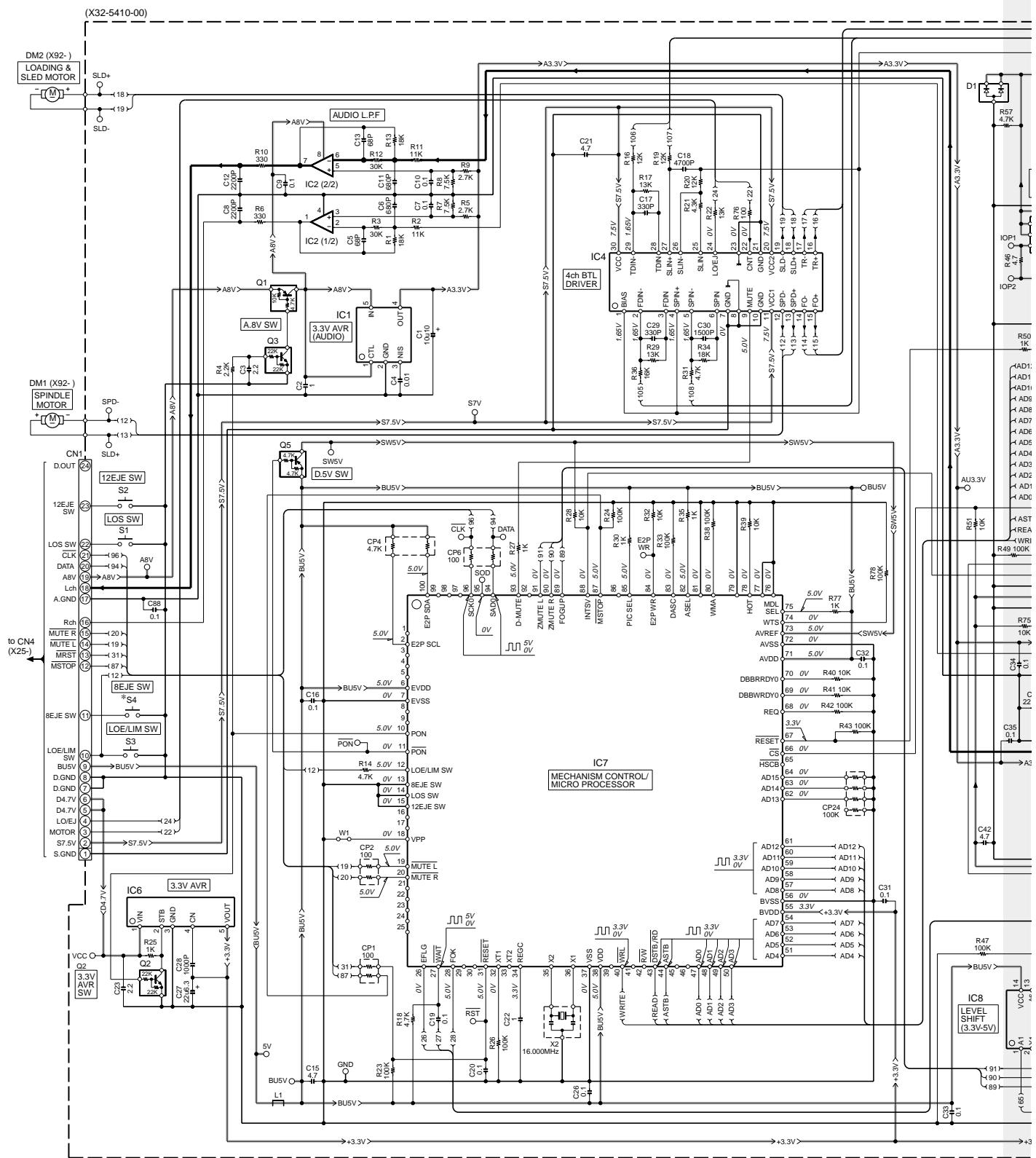
CD PLAYER UNIT
X32-5410-00 (J74-1487-12)

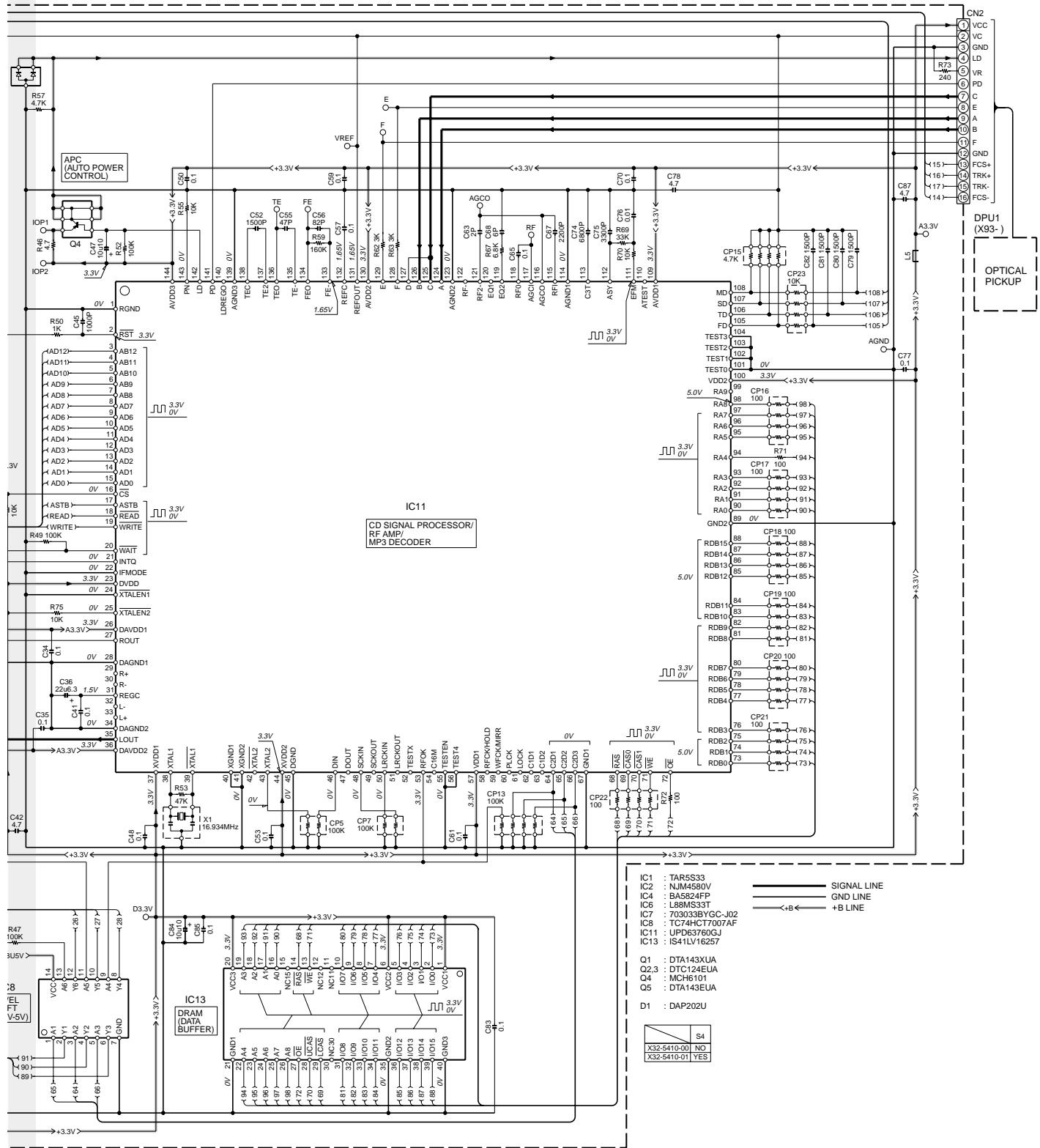


X32-5410-00

IC	Q	Address	IC	Q	Address
2		3AC	11		2AB
6		5AA	3		4AC
7		5AB	4		3Z
8		5AC	5		5AC

Refer to the schematic diagram for the values of resistors and capacitors.



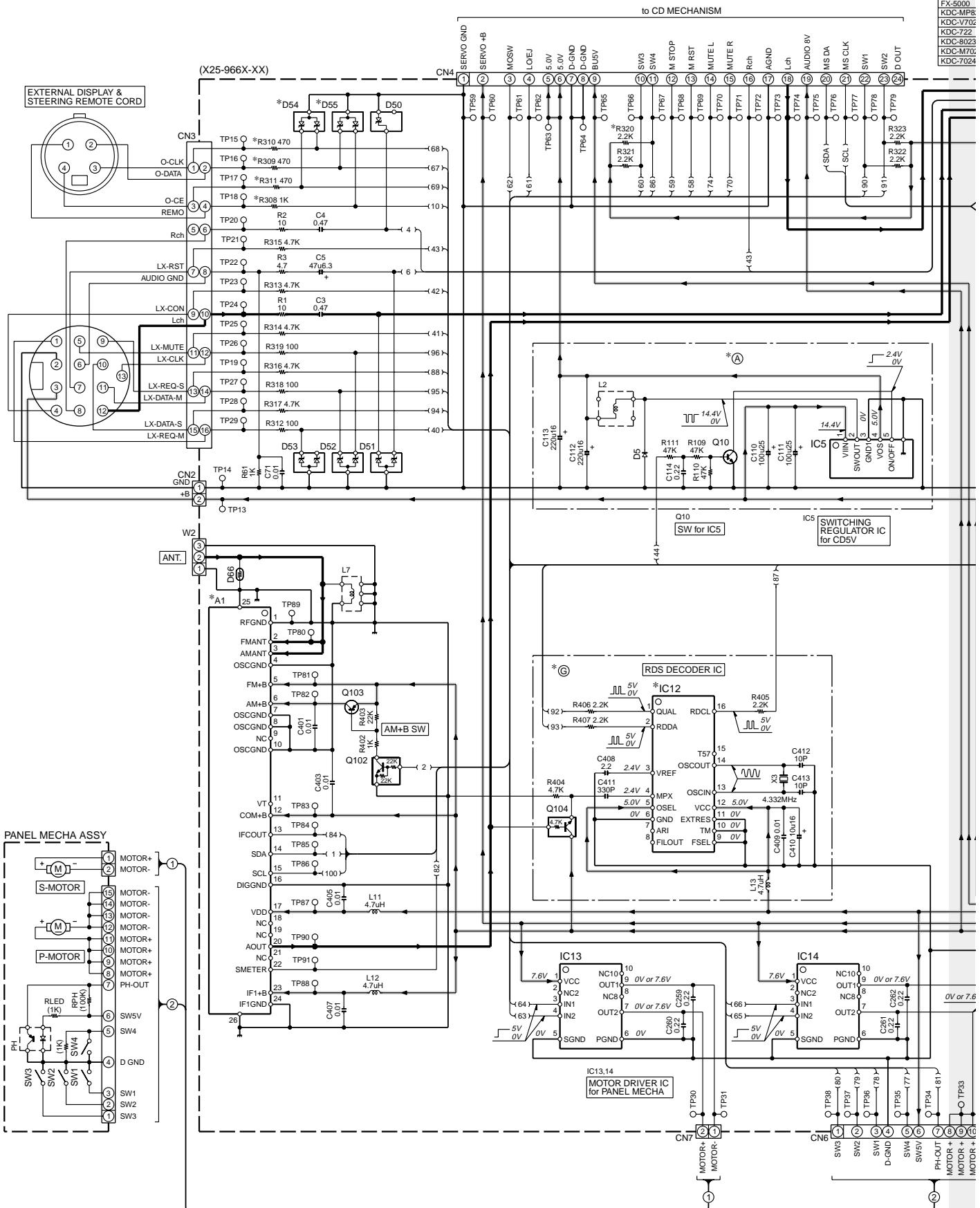


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

△ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

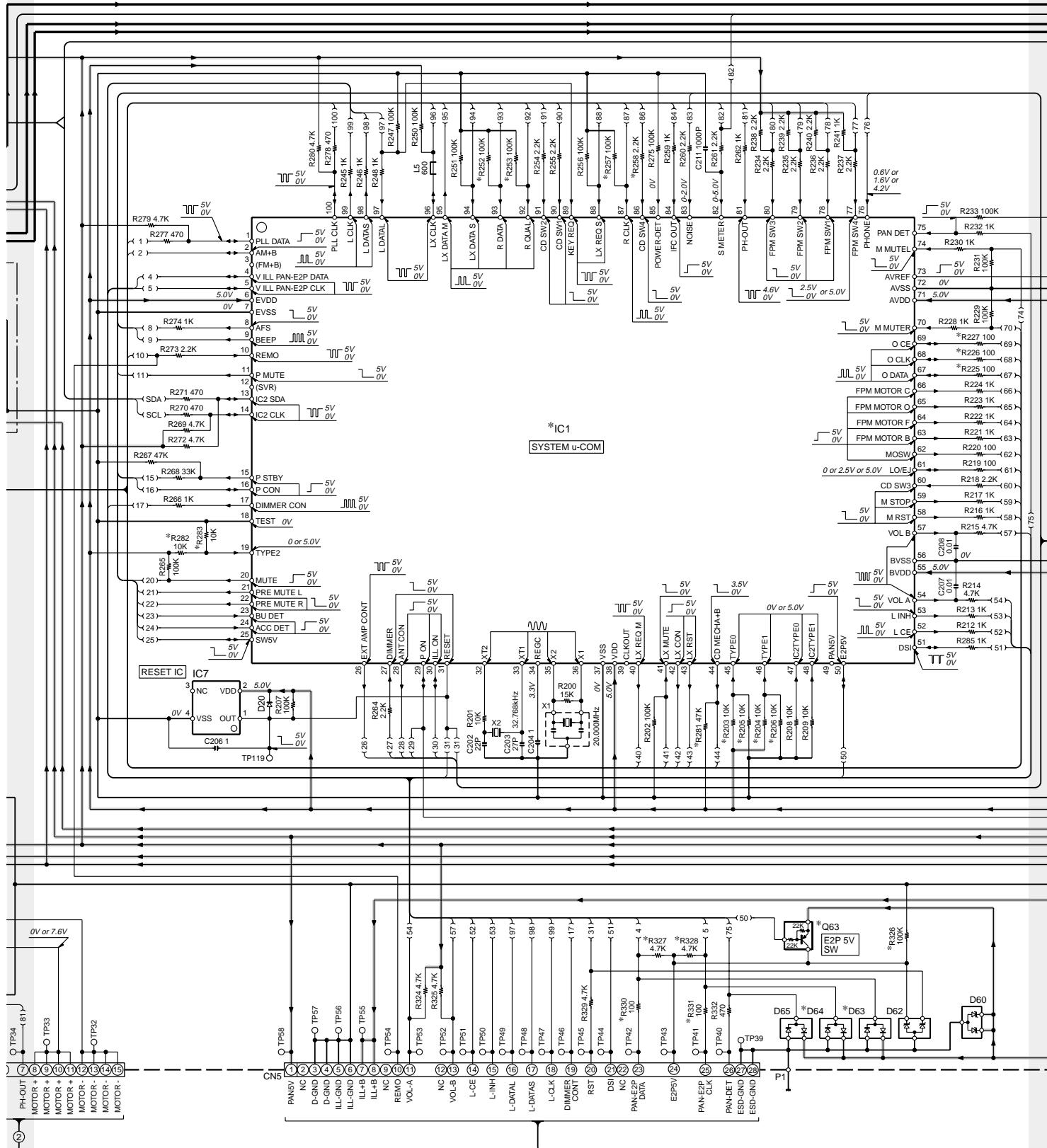
(X25-966)
MODEL
NAME
FX-5000
KDC-MP8
KDC-V702
KDC-722
KDC-8023
KDC-M702
KDC-7024



KDC-M7024/MP822

(X25-966X-XX)

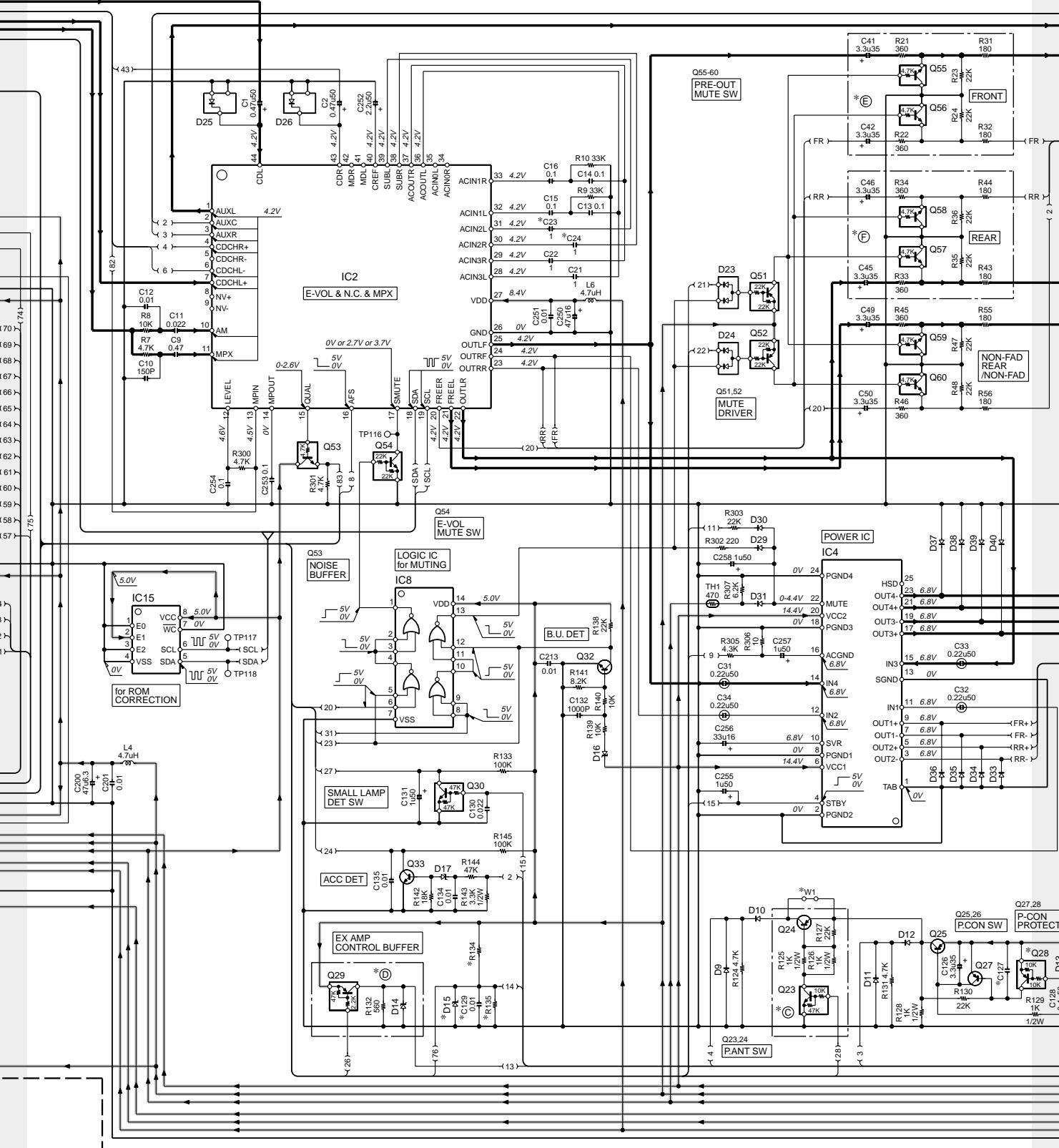
MODEL NAME	UNIT NO	A	B	C	D	E	F	G	A1	C23_24	C67	C68	C100	C127	C129	D15	D54_55	D63_64	IC1	Q22	Q63	R134	R135	R146	R147	R203.225-227, 308-311	R204	R205.252_253.254	R206_320	R286_320	R281	R282	R283	R326_330_331	W1
FX-5000	0-01	YES	YES	YES	YES	NO	NO	X86-3730-01	YES	NO	NO	3900u16	1u6.3	YES	YES	NO	NO	UPD703030G0C014	DTA14EUA	NO	100K	47K	YES	YES	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	
KDC-MP822	0-10	YES	NO	YES	NO	YES	NO	X86-3730-11	NO	YES	YES	2200u16	0.068u16	NO	NO	NO	NO	UPD703030G0C14	DTA124EUA	YES	NO	100K	NO	NO	NO	NO	YES	YES	NO	YES	NO	NO	NO	NO	
KDC-V7022	0-11	NO	YES	YES	NO	YES	NO	X86-3730-11	YES	NO	2200u16	0.068u16	NO	NO	NO	NO	UPD703030G0C15	DTA124EUA	YES	NO	100K	NO	NO	NO	NO	YES	YES	NO	NO	YES	NO	NO	NO		
KDC-T722	0-12	NO	NO	YES	NO	YES	NO	X86-3730-11	NO	YES	NO	2200u16	0.068u16	NO	NO	NO	NO	UPD703030G0C14	DTA124EUA	YES	NO	100K	NO	NO	NO	NO	YES	YES	NO	NO	NO	YES	NO	NO	
KDC-B8023	0-21	NO	YES	YES	YES	YES	NO	X86-3730-11	YES	NO	2200u16	0.068u16	NO	NO	NO	YES	UPD703030G0C15	DTA124EUA	YES	NO	100K	YES	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	NO		
KDC-M7024	2-71	YES	NO	NO	YES	YES	NO	X86-3732-70	YES	YES	NO	3900u16	0.068u16	YES	YES	YES	YES	UPD703030G0C14	DTA124EUA	YES	47K	22K	YES	YES	YES	NO	NO	YES	NO	YES	NO	NO	YES	NO	
KDC-T7024	2-72	NO	NO	YES	NO	YES	NO	X86-3732-70	YES	YES	NO	3900u16	0.068u16	YES	YES	YES	YES	UPD703030G0C15	DTA124EUA	YES	47K	22K	YES	YES	YES	YES	NO	NO	NO	NO	YES	NO	NO	YES	

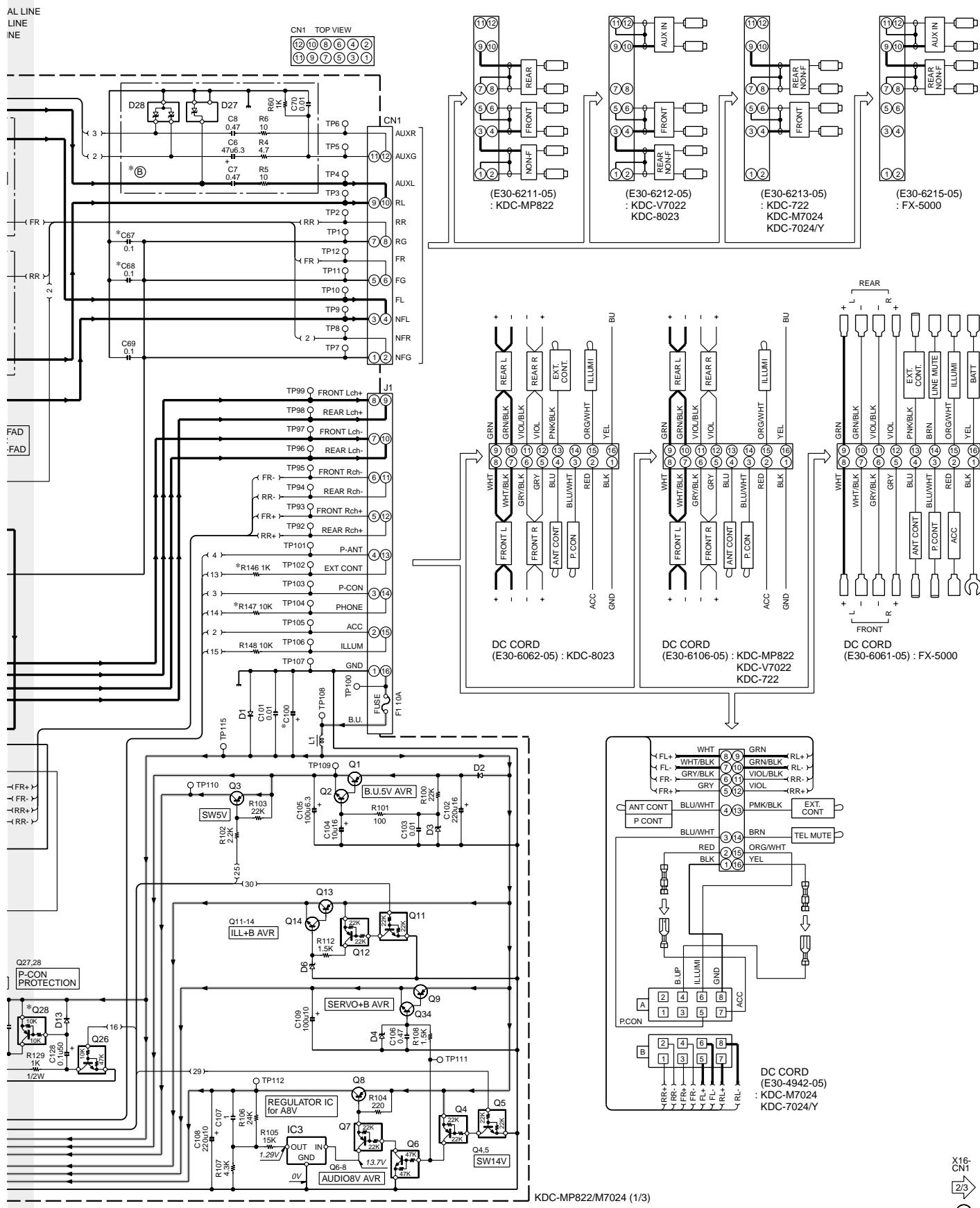


KDC-M7024/MP822

328, 331, W1
D NO
S NO
S NO
S NO
S NO
S YES
S YES

IC1	*	Q1,8,9,13	: 2SC2057	Q23,26	: DTC114YUA or	D1	: 1N5393C-M5	D14	: MA4056-M	D63-65	: DA204U
IC2	: TDA74111	Q2,10,14,32-34	: 2SC4081	Q24,25	: 2SB1240	D2	: RB160L-40	D15	: MA4047-M	D66	: IMSA-6801
IC3	: MS237ML	Q3,27	: 2SA1576A	Q28	*:	D3	: MA4056(N)-M	D16	: MA4068(N)-M		
IC4	: TDA7560	Q4,7,12,28,51,52,63	: DTA124EUA or	Q29	: DTA123JK or	D4	: MA4082(N)-L	D17	: MA4062(N)-M		
IC5	: SI-8050JD	UN5121	: DTC124EUA or	D5	: SFPB-54V	D5	: DAP2U or	D23,24	: MA412WA		
IC7	: S-80837CNB	Q5,11,54,102	: DTC144EUA or	D6	: MA4110-L	D6	: 1SR154-400 or	D25-27,50	: RD6.8M(B2)		
IC8	: TC74HC02AF	UN5213	: DTC144EUA or	D9-12,33-40	: 1SR154-400 or	S1J	: S1J	D28,51	: RD6.8MW		
IC12	: TDA7479D	Q6,30	: UN5213	Q103	: 2SB1188(Q,R)	D13,20,29-31	: 1SS133	D52-55,60,62	: MA3062WA		





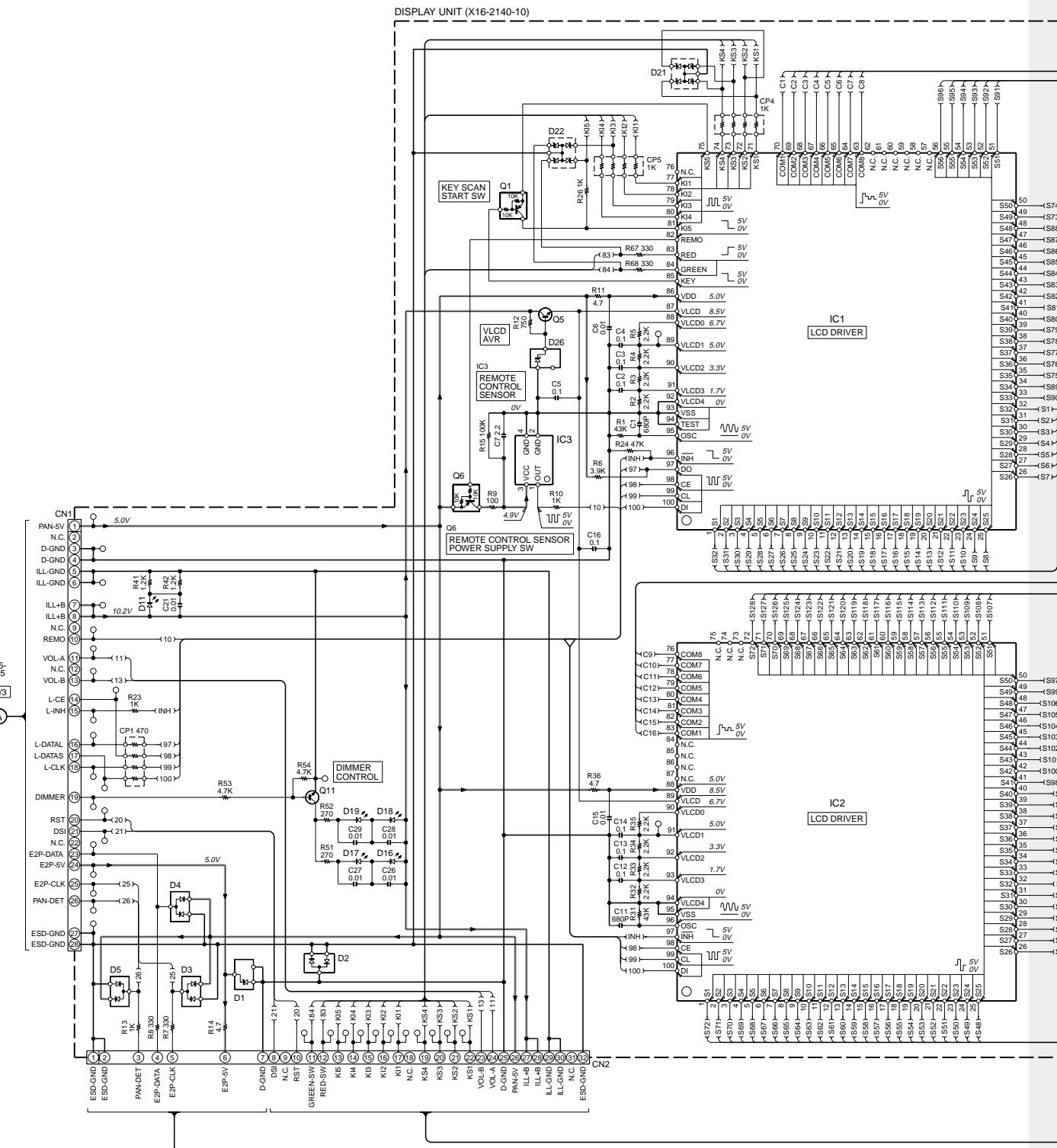
CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

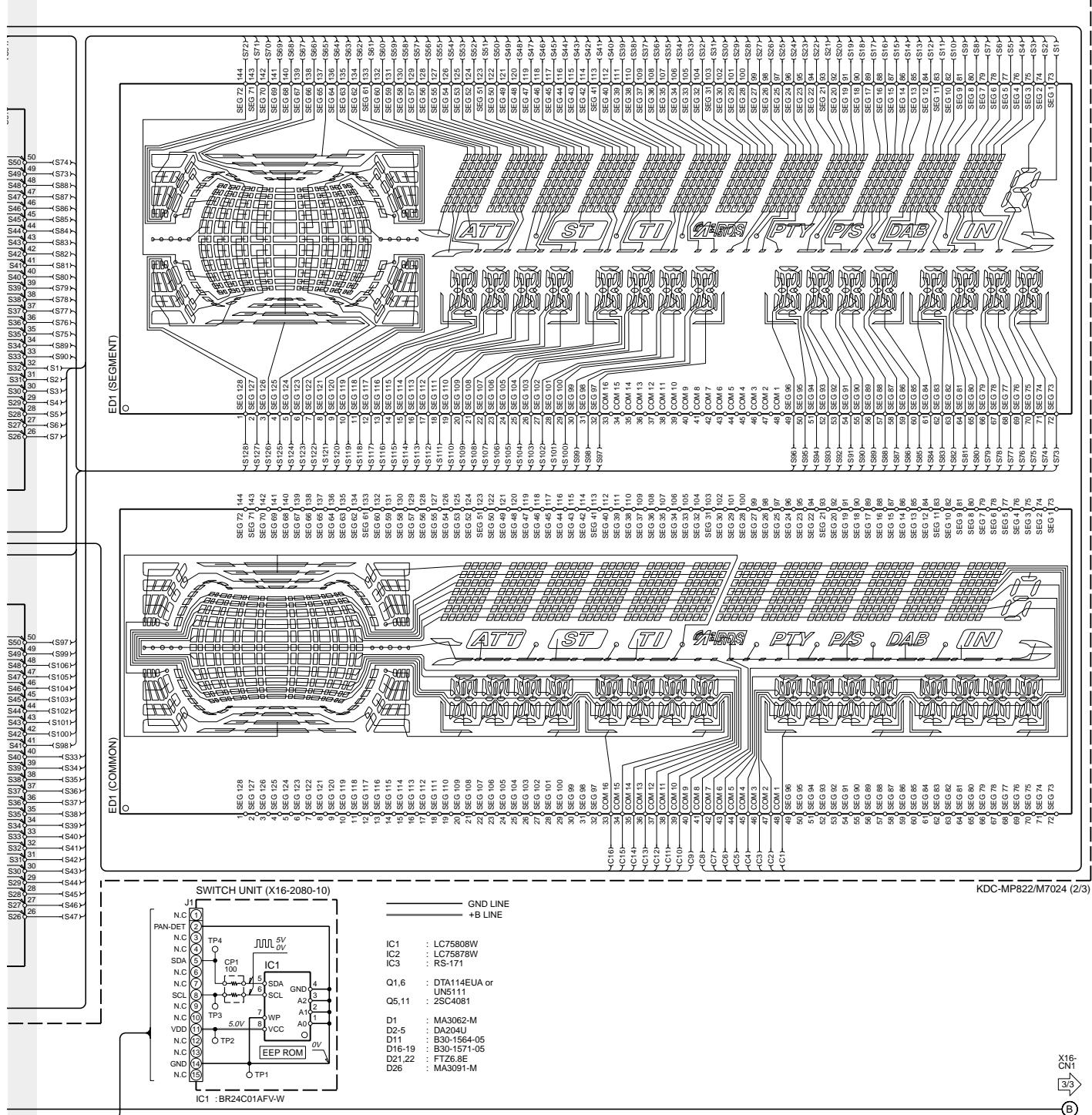
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (Refer to parts list).
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter.

DC voltages are as measured with a high impedance voltmeter.
Values may vary slightly due to variations between individual instruments or/and units.

KDC-M7024/MP822



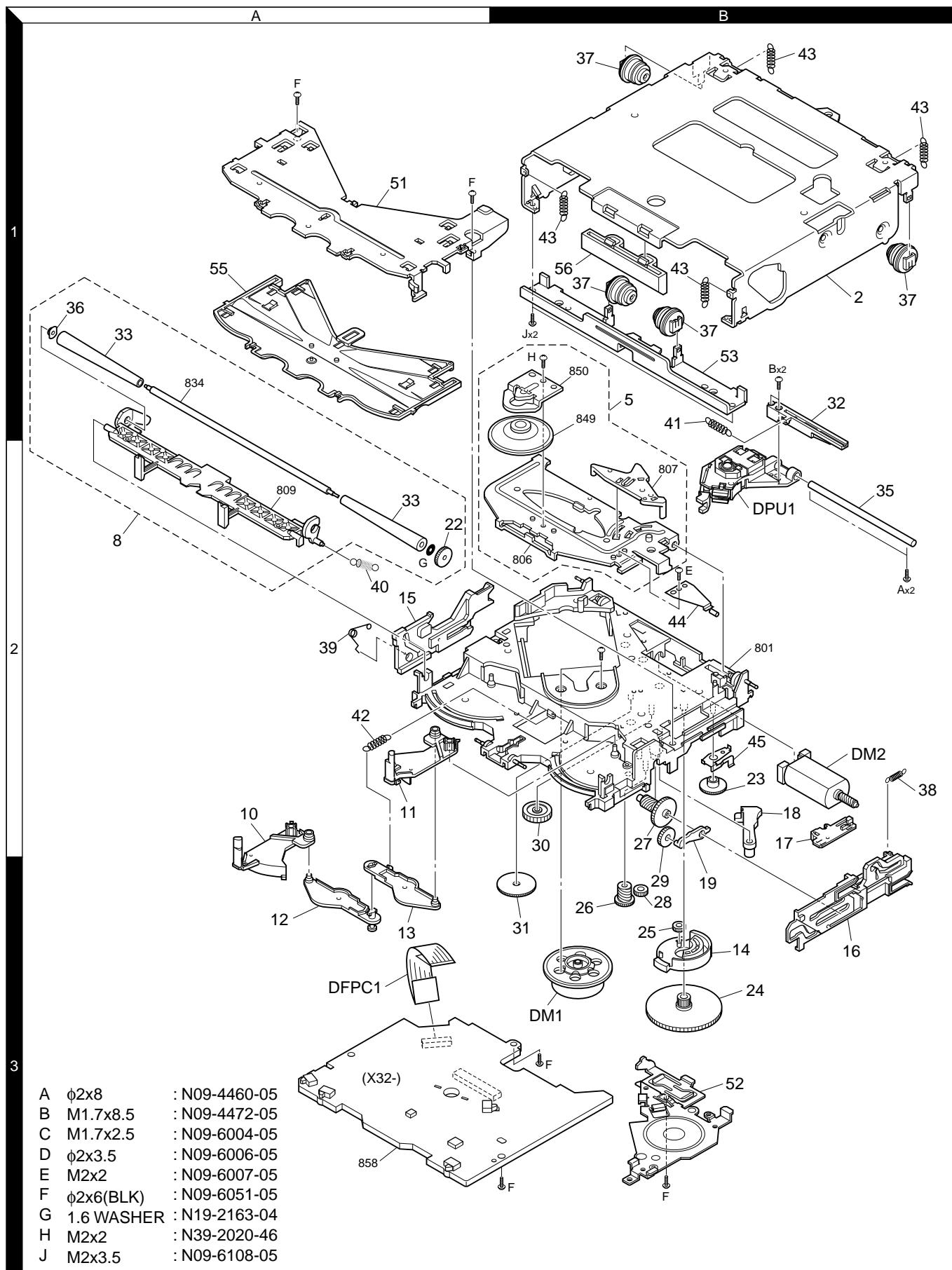


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

△ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

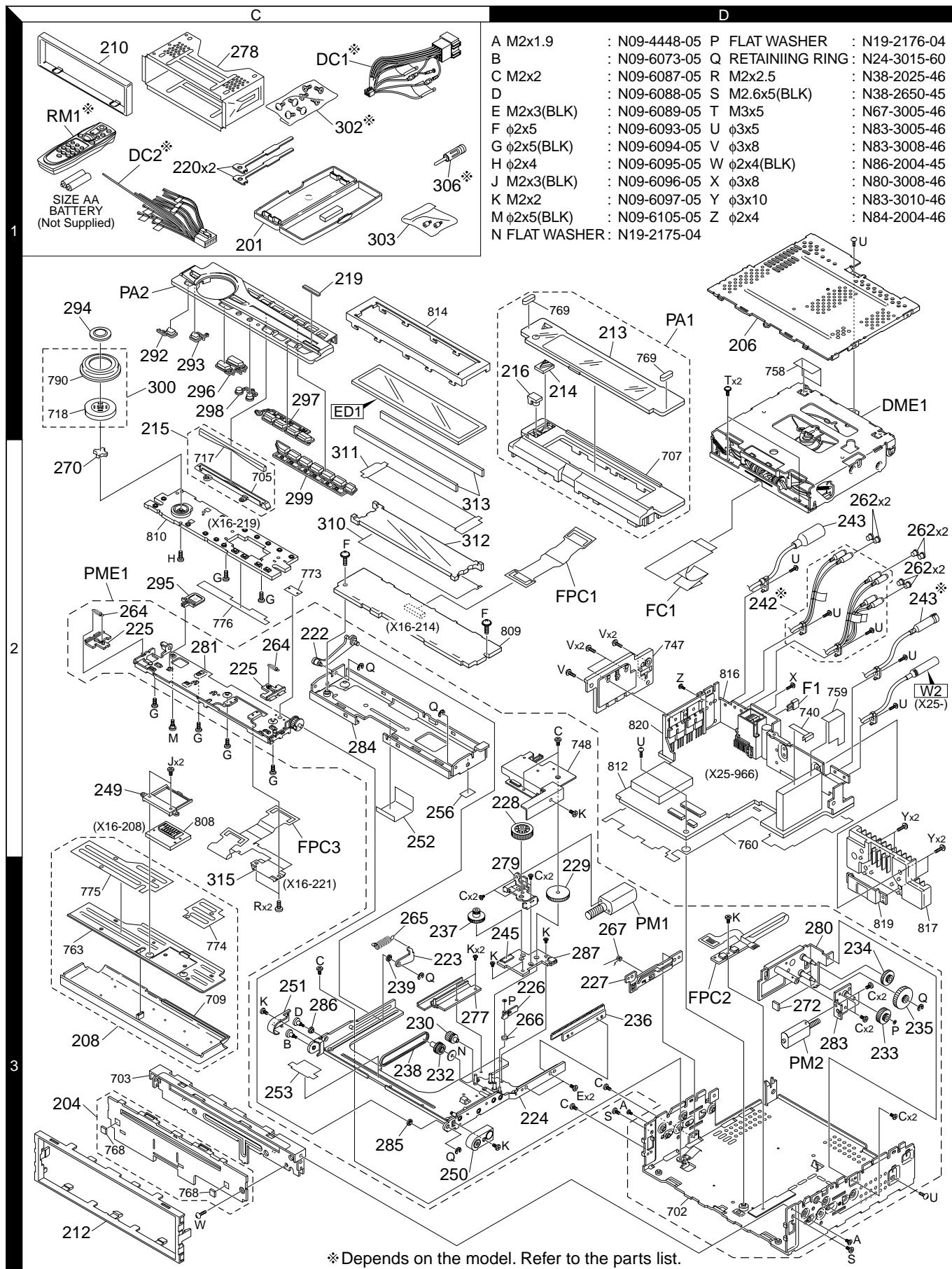
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (UNIT)



*Depends on the model. Refer to the parts list.

PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
KDC-M7024/MP822											
201	1C	*	A02-2731-03	PLASTIC CABINET ASSY		249	2C	*	F07-1121-03	COVER	
204	3C	*	A22-2988-03	SUB PANEL ASSY		250	3C	*	F07-1122-03	COVER	
206	1D	*	A52-0831-02	TOP PLATE		251	3C	*	F07-1123-03	COVER	
PA1	1D	*	A64-2978-01	PANEL ASSY	K3	252	2C	*	F09-1794-04	SHEET	
PA1	1D	*	A64-2986-01	PANEL ASSY	E3	253	3C	*	F09-1798-04	SHEET	
PA2	1C	*	A64-2995-02	PANEL ASSY	K3	256	2D	*	F09-1842-04	SHEET	
PA2	1C	*	A64-3003-02	PANEL ASSY	E3	262	2D		F29-0049-05	INSULATING COVER	
PME1	2C	*	A10-5029-11	CHASSIS ASSY	△ F1	262	2D		F52-0006-05	FUSE (MINI BLADE TYPE)	
RM1	1C		A70-2040-05	REMOTE CONTROLLER ASSY (RC-505)		264	2C	*	G01-3162-04	EXTENSION SPRING	
-			B46-0100-50	WARRANTY CARD	K3	265	3C	*	G01-3188-04	EXTENSION SPRING	
-			B46-0606-04	ID CARD	K3	266	3C	*	G01-3189-04	TORSION COIL SPRING	
-			B46-0612-14	ID CARD	E3	267	3D	*	G01-3199-04	TORSION COIL SPRING	
-		*	B46-0653-03	USER CARD	K3	270	2C	*	G11-3539-04	CUSHION	
-		*	B64-2460-00	INSTRUCTION MANUAL (ENGLISH)	K3	272	3D	*	G11-3559-04	CUSHION	
-		*	B64-2461-10	INSTRUCTION MANUAL (FRE.SPA.)	K3	-	-	*	H10-4854-12	POLYSTYRENE FOAMED FIXTURE	
-		*	B64-2468-00	INSTRUCTION MANUAL (ENGLISH)	E3	-	-	*	H21-1151-04	PROTECTION SHEET	
-		*	B64-2469-00	INSTRUCT. MANUAL (FRE.GER.DUT.)	E3	-	-		H25-0329-04	PROTECTION BAG (280X450X0.03)	K3
-		*	B64-2470-00	INSTRUCT. MANUAL (ITA.SPA.PRO.)	E3	-	-		H25-0337-04	PROTECTION BAG (180X300X0.03)	E3
-			B03-5015-03	DRESSING PLATE ASSY		-	-		H25-1111-04	PROTECTION BAG (280X450X0.03)	
208	3C					277	3C	*	J19-5220-03	HOLDER	
210	1C	*	B07-3078-01	ESUTCHEON		278	1C		J21-9823-03	Mounting hardware assy	
212	3C	*	B07-3080-02	ESUTCHEON		279	3D	*	J21-9951-03	Mounting hardware assy	K3
213	1D	*	B10-4385-01	FRONT GLASS	K3	280	3D	*	J21-9954-02	Mounting hardware assy	E3
213	1D	*	B10-4393-01	FRONT GLASS	E3	281	2C	*	J21-9956-12	Mounting hardware assy	
214	1C	*	B12-1221-04	INDICATOR		283	3D	*	J21-9997-03	Mounting hardware assy	
215	1C	*	B12-1222-03	INDICATOR ASSY		284	2C	*	J21-9999-02	Mounting hardware assy	
216	1C	*	B19-2201-04	LIGHTING BOARD		285	3C	*	J31-1055-04	COLLAR	
219	1C	*	B43-1505-04	KENWOOD BADGE		286	3C	*	J31-1056-04	COLLAR	
220	1C		D10-4674-04	LEVER		287	3D	*	J74-1444-04	RIGID PRINTED WIRING BOARD	
222	2C	*	D10-4716-04	ARM ASSY		FPC1	2D	*	J84-0153-05	FLEXIBLE PRINTED WIRING BOARD	
223	3C	*	D10-4718-04	ARM ASSY		FPC2	3D	*	J84-0156-04	FLEXIBLE PRINTED WIRING BOARD	
224	3D	*	D10-4721-11	SLIDER ASSY		292	1C	*	K24-4004-04	KNOB (PLAY)	
225	2C	*	D10-4749-03	LEVER		293	1C	*	K24-4005-04	KNOB (EJECT)	
226	3D	*	D10-4750-04	LEVER		294	1C	*	K24-4006-04	KNOB (ATT)	
227	3D	*	D12-0637-03	CAM		295	2C	*	K24-4007-04	KNOB (OPEN)	
228	2D	*	D13-2270-04	GEAR		296	1C	*	K25-1527-03	KNOB (SRC,Q)	
229	3D	*	D13-2272-04	GEAR		297	1C	*	K25-1529-03	KNOB (AM/FM)	
230	3C	*	D13-2273-14	GEAR		298	1C	*	K25-1530-04	KNOB (SCRL)	
232	3C	*	D13-2274-14	GEAR		299	2C	*	K25-1528-03	KNOB (1-6)	
233	3D	*	D13-2276-04	GEAR		300	1C	*	K29-7031-03	KNOB ASSY (VOL)	
234	3D	*	D13-2277-04	GEAR		302	1C	*	N99-1723-05	SCREW SET	K3
235	3D	*	D13-2278-04	GEAR		303	1C	*	N99-1734-05	SCREW SET	
236	3D	*	D13-2289-03	RACK (GEAR)		A	3D		N09-4448-05	MACHINE SCREW	
237	3C	*	D13-2290-04	GEAR ASSY		B	3C	*	N09-6073-05	STEPPED SCREW	
238	3C	*	D16-0617-05	BELT		C	3D	*	N09-6087-05	MACHINE SCREW	
239	3C	*	D23-0958-04	RETAINER		D	3C	*	N09-6088-05	STEPPED SCREW	
242	2D	*	E30-6211-05	CORD WITH PINPLUG (3PR)	K3	E	3D	*	N09-6089-05	MACHINE SCREW	
242	2D	*	E30-6213-05	CORD WITH PINPLUG (2PR)	E3	F	2C	*	N09-6093-05	TAPTRIE SCREW	
243	2D	*	E30-6216-05	CORD WITH DIN CONNECTOR (CH)	K3	G	2C	*	N09-6094-05	MACHINE SCREW	
243	2D	*	E30-6217-05	CORD WITH DIN CONNECTOR (CH+DIS)	E3						
245	3D	*	E41-0351-05	FLAT CABLE CONNECTOR							
△ DC1	1C		E30-4942-05	DC CORD (ISO)	E3						
△ DC2	1C		E30-6106-05	DC CORD	K3						

PARTS LIST

* New parts

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KDC-M7024/MP822

Ref. No.	A q d	N e w	Parts No.	Description	Desti- nation
H	2C	*	N09-6095-05	MACHINE SCREW	
J	2C	*	N09-6096-05	MACHINE SCREW	
K	3C	*	N09-6097-05	MACHINE SCREW	
M	2C	*	N09-6105-05	STEPPED SCREW	
N	2C	*	N19-2175-04	FLAT WASHER	
P	3D	*	N19-2176-04	FLAT WASHER	
Q	2C		N24-3015-60	E TYPE RETAINING RING	
R	3C		N38-2025-46	PAN HEAD MACHIN SCREW	
S	3D	*	N38-2650-45	PAN HEAD MACHIN SCREW	
T	2D		N67-3005-46	PAN HEAD SEMS SCREW	
U	2D		N83-3005-46	PAN HEAD TAPTTIE SCREW	
V	2D		N83-3008-46	PAN HEAD TAPTTIE SCREW	
W	3C		N86-2004-45	BINDING HEAD TAPTTIE SCREW	
RLED			RK73GB2A102J	CHIP R 1.0K J 1/10W	
RPH			RK73GB2A104J	CHIP R 100K J 1/10W	
SW1			S68-0871-05	PUSH SWITCH (PANEL MECHA)	
SW2-3			S68-0863-05	PUSH SWITCH (PANEL MECHA)	
SW4			S68-0864-05	PUSH SWITCH (PANEL MECHA)	
306	1C		T90-0552-05	ANTENNA ADAPTOR	E3
PH			T95-0212-05	OPTO ISOLATOR (PANEL MECHA)	
PM1	3D	*	T42-1076-14	MOTOR ASSY	
PM2	3D	*	T42-1077-04	MOTOR ASSY	
DME1	1D		X92-4670-01	CD MECHANISM ASSY	

SUB-CIRCUIT UNIT (X16-2080-10)

J1		E59-0833-15	RECTANGULAR PLUG	
CP1		R90-1019-05	MULTI-COMP 100 X2	
IC1	*	BR24C01AFV-W	MEMORY IC	

SUB-CIRCUIT UNIT (X16-2140-10)

310	2C	*	B11-1405-04	REFLECTION SHEET	
311	2C	*	B11-1406-04	OPTICAL DIFFUSER	
312	2C	*	B19-2204-02	LIGHTING BOARD	
D11			B30-1564-05	LED (1608, BLUE)	
D16-19			B30-1571-05	LED (WHITE)	
ED1		*	B38-1119-05	LIQUID CRYSTAL	
C1			CC73GCH1H681J	CHIP C 680PF J	
C2-5			CK73GB1C104K	CHIP C 0.10UF K	
C2-5			CK73GB1H104K	CHIP C 0.10UF K	
C6			CK73GB1H103K	CHIP C 0.010UF K	
C7			CK73FB1A225K	CHIP C 2.2UF K	
C11			CC73GCH1H681J	CHIP C 680PF J	
C12-14			CK73GB1C104K	CHIP C 0.10UF K	
C12-14			CK73GB1H104K	CHIP C 0.10UF K	
C15			CK73GB1H103K	CHIP C 0.010UF K	
C16			CK73GB1C104K	CHIP C 0.10UF K	
C16			CK73GB1H104K	CHIP C 0.10UF K	
C21			CK73GB1H103K	CHIP C 0.010UF K	
C26-29			CK73GB1H103K	CHIP C 0.010UF K	
313	2C	*	E29-1930-04	CONDUCTIVE RUBBER	
CN1			E40-9364-05	FLAT CABLE CONNECTOR	
CN2			E41-0166-05	FLAT CABLE CONNECTOR	

Ref. No.	A q d	N e w	Parts No.	Description	Desti- nation
CP1			R90-1016-05	MULTI-COMP 470 X4	
CP4,5			R90-0724-05	MULTI-COMP 1K X4	
R1			RK73GB2A433J	CHIP R 43K J 1/10W	
R2-5			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R6			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R7,8			RK73GB2A331J	CHIP R 330 J 1/10W	
R9			RK73GB2A101J	CHIP R 100 J 1/10W	
R10			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R11			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R12			RK73GB2A751J	CHIP R 750 J 1/10W	
R13			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R14			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R15			RK73GB2A104J	CHIP R 100K J 1/10W	
R23			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R24			RK73GB2A473J	CHIP R 47K J 1/10W	
R26			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R31			RK73GB2A433J	CHIP R 43K J 1/10W	
R32-35			RK73GB2A222J	CHIP R 2.2K J 1/10W	
R36			RK73GB2A4R7J	CHIP R 4.7 J 1/10W	
R41,42			RK73GB2A122J	CHIP R 1.2K J 1/10W	
R51,52			RK73FB2B271J	CHIP R 270 J 1/8W	
R53,54			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R67,68			RK73GB2A331J	CHIP R 330 J 1/10W	
D1			MA3062-M	ZENER DIODE	
D2-5			DA204U	DIODE	
D21,22			FTZ6.8E	ZENER DIODE	
D26			MA3091-M	ZENER DIODE	
IC1			LC75808W	MOS-IC	
IC2			LC75878W	MOS-IC	
IC3			RS-171	ANALOGUE IC	
Q1			DTA114EUA	DIGITAL TRANSISTOR	
Q1			UN5111	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q6			DTA114EUA	DIGITAL TRANSISTOR	
Q6			UN5111	DIGITAL TRANSISTOR	
Q11			2SC4081	TRANSISTOR	
SWITCH UNIT (X16-2190-10)					
D1-11			B30-1605-05	LED (2COLOR PG/RED)	
D12			B30-1566-05	LED (1608, RED)	
D13			B30-1605-05	LED (2COLOR PG/RED)	
D14			B30-1566-05	LED (1608, RED)	
D15			B30-1605-05	LED (2COLOR PG/RED)	
D16			B30-1566-05	LED (1608, RED)	
D17			B30-1605-05	LED (2COLOR PG/RED)	
D18,19			B30-1566-05	LED (1608, RED)	
D21			B30-1566-05	LED (1608, RED)	
CN1		*	E41-0419-05	FLAT CABLE CONNECTOR	
R1,2			RK73FB2B511J	CHIP R 510 J 1/8W	
R3-5			RK73FB2B331J	CHIP R 330 J 1/8W	
R6-9			RK73FB2B511J	CHIP R 510 J 1/8W	
R10			RK73FB2B471J	CHIP R 470 J 1/8W	
R15			RK73GB2A241J	CHIP R 240 J 1/10W	
R16-19			RK73GB2A102J	CHIP R 1.0K J 1/10W	

PARTS LIST

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SWITCH UNIT (X16-2190-10)

Ref. No.	A d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d	N e w	Parts No.	Description	Desti- nation
S1		*	S70-0901-05	TACT SWITCH		C126			CE04NW1V3R3M	ELECTRO 3.3UF 35WV	
S2,3			S70-0864-05	TACT SWITCH		C127			CK73GB1C683K	CHIP C 0.068UF K	
S4			S70-0856-05	TACT SWITCH		C127			CK73GB1H683K	CHIP C 0.068UF K	
S5-8			S70-0864-05	TACT SWITCH		C128			CE04NW1H0R1M	ELECTRO 0.1UF 50WV	
S9			S70-0856-05	TACT SWITCH		C129			CK73GB1H103K	CHIP C 0.010UF K	E3
S10-13			S70-0864-05	TACT SWITCH		C130			CK73GB1E223K	CHIP C 0.022UF K	
S14			S70-0856-05	TACT SWITCH		C130			CK73GB1H223K	CHIP C 0.022UF K	
S15-18			S70-0864-05	TACT SWITCH		C131			CE04NW1H010M	ELECTRO 1.0UF 50WV	
S19			S70-0856-05	TACT SWITCH		C132			CK73GB1H102K	CHIP C 1000PF K	
S20			S70-0864-05	TACT SWITCH		C134,135			CK73GB1H103K	CHIP C 0.010UF K	
S21		*	T99-0445-05	ROTARY ENCODER		C200			CE04NW0J470M	ELECTRO 47UF 6.3WV	
D20			DAP202U	DIODE		C201			CK73GB1H103K	CHIP C 0.010UF K	
D20			MA142WA	DIODE		C202			CC73GCH1H220J	CHIP C 22PF J	
Q1			DTA114YUA	DIGITAL TRANSISTOR		C203			CC73GCH1H270J	CHIP C 27PF J	
Q1			UN5114	DIGITAL TRANSISTOR		C204			CK73GB0J105K	CHIP C 1.0UF K	
Q2,3			2SC4081	TRANSISTOR		C206			CK73GB0J105K	CHIP C 1.0UF K	
SUB-CIRCUIT UNIT (X16-2210-10)											
315	2C	*	E58-0968-05	RECTANGULAR RECEPTACLE		C207,208			CK73GB1H103K	CHIP C 0.010UF K	
FPC3	2C	*	J84-0154-05	FLEXIBLE PRINTED WIRING BOARD		C211			CK73GB1H103K	CHIP C 0.010UF K	
ELECTRIC UNIT (X25-966x-xx)											
C1,2			CE04NW1HR47M	ELECTRO 0.47UF 50WV		C213			CK73GB1H103K	CHIP C 0.010UF K	
C3,4			CK73FB1C474K	CHIP C 0.47UF K		C250			CE04NW1C470M	ELECTRO 47UF 16WV	
C5			CE04NW0J470M	ELECTRO 47UF 6.3WV		C251			CK73GB1H103K	CHIP C 0.010UF K	
C9			CK73GB1A474K	CHIP C 0.47UF K		C252			CE04MW1H2R2M	ELECTRO 2.2UF 50WV	E3
C10			CC73GCH1H151J	CHIP C 150PF J		C252			CE04NW1H2R2M	ELECTRO 2.2UF 50WV	K3
C11			CK73GB1E223K	CHIP C 0.022UF K		C253,254			CK73GB1C104K	CHIP C 0.10UF K	
C11			CK73GB1H223K	CHIP C 0.022UF K		C253,254			CK73GB1H104K	CHIP C 0.10UF K	
C12			CK73GB1H103K	CHIP C 0.010UF K		C255			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C13-16			CK73FB1H104K	CHIP C 0.10UF K		C256			CE04NW1C330M	ELECTRO 33UF 16WV	
C21-24			CK73FB1C105K	CHIP C 1.0UF K	E3	C257			C90-2935-05	ELECTRO 1.0UF 50WV	
C21,22			CK73FB1C105K	CHIP C 1.0UF K	K3	C258			CE04NW1H010M	ELECTRO 1.0UF 50WV	
C31-34			C90-5296-05	NP-ELECT 0.22UF 50WV		C259-262			CK73GB1A224K	CHIP C 0.22UF K	
C41,42			CE04NW1V3R3M	ELECTRO 3.3UF 35WV		C401			CK73GB1H103K	CHIP C 0.010UF K	
C45,46			CE04NW1V3R3M	ELECTRO 3.3UF 35WV		C403			CK73GB1H103K	CHIP C 0.010UF K	
C49,50			CE04NW1V3R3M	ELECTRO 3.3UF 35WV	K3	C405			CK73GB1H103K	CHIP C 0.010UF K	
C67			CK73FB1H104K	CHIP C 0.10UF K	E3	C407			CK73GB1H103K	CHIP C 0.010UF K	
C67-69			CK73FB1H104K	CHIP C 0.10UF K	K3	C408			CK73FB1A225K	CHIP C 2.2UF K	E3
C69			CK73FB1H104K	CHIP C 0.10UF K	E3	C409			CK73GB1H103K	CHIP C 0.010UF K	E3
C71			CK73GB1H103K	CHIP C 0.010UF K	E3	C410			CE04NW1C100M	ELECTRO 10UF 16WV	E3
C100			C90-5235-05	ELECTRO 2200UF 16WV	K3	C411			CC73GCH1H331J	CHIP C 330PF J	E3
C100			C90-5484-05	ELECTRO 3900UF 16WV	E3	C412,413			CC73GCH1H100D	CHIP C 10PF D	E3
C101			CK73GB1H103K	CHIP C 0.010UF K		CN1					
C102			C90-2866-05	ELECTRO 220UF 16WV		CN2			E41-0224-05	PIN ASSY	
C103			CK73GB1H103K	CHIP C 0.010UF K		CN3			E40-3237-05	PIN ASSY	
C104			CE04NW1C100M	ELECTRO 10UF 16WV		CN4			E41-0384-05	PIN ASSY	
C105			CE04NW0J101M	ELECTRO 100UF 6.3WV		CN4			E40-9527-05	FLAT CABLE CONNECTOR	
C106			CK73GB1A474K	CHIP C 0.47UF K		CN5			E41-0213-05	FLAT CABLE CONNECTOR	
C107			CK73FB1C105K	CHIP C 1.0UF K		CN6					
C108			CE04CW1A221M	ELECTRO 220UF 10WV		CN7			E40-9368-05	FLAT CABLE CONNECTOR	
C109			CE04CW1A101M	ELECTRO 100UF 10WV		J1			E41-0399-05	FLAT CABLE CONNECTOR	
C110,111			C90-2963-05	ELECTRO 100UF 25WV		W2			E41-0009-05	PIN ASSY	
C112,113			C90-5418-05	ELECTRO 220UF 16WV		L1			E58-0863-15	RECTANGULAR RECEPTACLE	
C114			CK73GB1A224K	CHIP C 0.22UF K		L2			E30-6218-05	CORD WITH PLUG	
C110,111			C90-2963-05	ELECTRO 100UF 25WV		L4					
C112,113			C90-5418-05	ELECTRO 220UF 16WV		L5					
C114			CK73GB1A224K	CHIP C 0.22UF K		L6					

E : Europe K : North America
M : Other Areas W : Without Europe

K3 : KDC-MP822
E3 : KDC-M7024

△ Indicates safety critical components.

PARTS LIST

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ELECTRIC UNIT (X25-966x-xx)

Ref. No.	A d	N e w	Parts No.	Description				Desti- nation
L7			L33-1039-05	LINE FILTER COIL				
L11-13			L40-4795-34	SMALL FIXED INDUCTOR	E3			
L11-13			L40-4795-68	SMALL FIXED INDUCTOR (4.7UH)	E3			
L11,12			L40-4795-34	SMALL FIXED INDUCTOR	K3			
L11,12			L40-4795-68	SMALL FIXED INDUCTOR (4.7UH)	K3			
X1			L78-0821-05	RESONATOR				
X2			L77-2738-05	CRYSTAL RESONATOR				
X3			L77-2002-05	CRYSTAL RESONATOR	E3			
U	2D		N83-3005-46	PAN HEAD TAPTTIE SCREW				
X	2D		N80-3008-46	PAN HEAD TAPTTIE SCREW				
Y	2D		N83-3010-46	PAN HEAD TAPTTIE SCREW				
Z	2D		N84-2004-46	PAN HEAD TAPTTIE SCREW				
R1,2			RK73EB2E100J	CHIP R 10 J 1/4W				
R3			RK73EB2E4R7J	CHIP R 4.7 J 1/4W				
R7			RK73GB2A472J	CHIP R 4.7K J 1/10W				
R8			RK73GB2A103J	CHIP R 10K J 1/10W				
R9,10			RK73FB2B33J	CHIP R 33K J 1/8W				
R21,22			RK73GB2A361J	CHIP R 360 J 1/10W				
R23,24			RK73GB2A223J	CHIP R 22K J 1/10W				
R31,32			RK73EB2E181J	CHIP R 180 J 1/4W				
R33,34			RK73GB2A361J	CHIP R 360 J 1/10W	K3			
R35,36			RK73GB2A223J	CHIP R 22K J 1/10W	K3			
R43,44			RK73EB2E181J	CHIP R 180 J 1/4W	K3			
R45,46			RK73GB2A361J	CHIP R 360 J 1/10W	K3			
R47,48			RK73GB2A223J	CHIP R 22K J 1/10W	K3			
R55,56			RK73EB2E181J	CHIP R 180 J 1/4W				
R61			RK73GB2A102J	CHIP R 1.0K J 1/10W				
R100			RK73FB2B223J	CHIP R 22K J 1/8W				
R101			RK73GB2A101J	CHIP R 100 J 1/10W				
R102			RK73GB2A222J	CHIP R 2.2K J 1/10W				
R103			RK73GB2A223J	CHIP R 22K J 1/10W				
R104			RK73FB2B221J	CHIP R 220 J 1/8W				
R105			RK73GB2A153J	CHIP R 15K J 1/10W				
R106			R92-3047-05	CHIP R 24K D 1/10W				
R107			R92-3032-05	CHIP R 4.3K D 1/10W				
R108			RK73FB2B152J	CHIP R 1.5K J 1/8W				
R109-111			RK73GB2A473J	CHIP R 47K J 1/10W				
R112			RK73FB2B152J	CHIP R 1.5K J 1/8W				
R124			RK73FB2B472J	CHIP R 4.7K J 1/8W				
R125,126			RD14DB2H102J	SMALL-RD 1.0K J 1/2W	K3			
R127			RK73GB2A223J	CHIP R 22K J 1/10W	K3			
R128,129			RD14DB2H102J	SMALL-RD 1.0K J 1/2W	K3			
R130			RK73GB2A223J	CHIP R 22K J 1/10W	E3			
R131			RK73FB2B472J	CHIP R 4.7K J 1/8W	E3			
R132			RK73FB2B561J	CHIP R 560 J 1/8W	E3			
R133			RK73GB2A104J	CHIP R 100K J 1/10W	E3			
R134			RK73GB2A473J	CHIP R 47K J 1/10W	E3			
R135			RK73GB2A104J	CHIP R 100K J 1/10W	K3			
R135			RK73GB2A223J	CHIP R 22K J 1/10W	E3			
R138			RK73GB2A223J	CHIP R 22K J 1/10W				
R139			RK73FB2B103J	CHIP R 10K J 1/8W				
R140			RK73GB2A103J	CHIP R 10K J 1/10W				
R141			RK73GB2A822J	CHIP R 8.2K J 1/10W				
R142			RK73GB2A183J	CHIP R 18K J 1/10W				

Ref. No.	A d	N e w	Parts No.	Description				Desti- nation
R143			RD14DB2H332J	SMALL-RD 3.3K	J	1/2W		
R144			RK73EB2E473J	CHIP R 47K	J	1/4W		
R145			RK73GB2A104J	CHIP R 100K	J	1/10W		
R146			RK73EB2E102J	CHIP R 1.0K	J	1/4W	E3	
R147,148			RK73EB2E103J	CHIP R 10K	J	1/4W	E3	
R148			RK73EB2E103J	CHIP R 10K	J	1/4W	K3	
R200			RK73GB2A153J	CHIP R 15K	J	1/10W		
R201			RK73GB2A103J	CHIP R 10K	J	1/10W		
R202			RK73GB2A104J	CHIP R 100K	J	1/10W		
R203			RK73GB2A103J	CHIP R 10K	J	1/10W	E3	
R205,206			RK73GB2A103J	CHIP R 10K	J	1/10W	K3	
R206			RK73GB2A103J	CHIP R 10K	J	1/10W	E3	
R207			RK73GB2A104J	CHIP R 100K	J	1/10W		
R208,209			RK73GB2A103J	CHIP R 10K	J	1/10W		
R212,213			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R214,215			RK73GB2A472J	CHIP R 4.7K	J	1/10W		
R216,217			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R218			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R219,220			RK73GB2A101J	CHIP R 100	J	1/10W		
R221-224			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R225-227			RK73GB2A101J	CHIP R 100	J	1/10W		
R228			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R229			RK73GB2A104J	CHIP R 100K	J	1/10W		
R230			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R231			RK73GB2A104J	CHIP R 100K	J	1/10W		
R232			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R233			RK73GB2A104J	CHIP R 100K	J	1/10W		
R234-240			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R241			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R245,246			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R247			RK73GB2A104J	CHIP R 100K	J	1/10W		
R248			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R250-253			RK73GB2A104J	CHIP R 100K	J	1/10W		
R250,251			RK73GB2A104J	CHIP R 100K	J	1/10W		
R254,255			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R256			RK73GB2A104J	CHIP R 100K	J	1/10W		
R256,257			RK73GB2A104J	CHIP R 100K	J	1/10W		
R259			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R260,261			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R262			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R264			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R265			RK73GB2A104J	CHIP R 100K	J	1/10W		
R266			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R267			RK73GB2A473J	CHIP R 47K	J	1/10W		
R268			RK73GB2A333J	CHIP R 33K	J	1/10W		
R269			RK73GB2A472J	CHIP R 4.7K	J	1/10W		
R270,271			RK73GB2A471J	CHIP R 470	J	1/10W		
R272			RK73GB2A472J	CHIP R 4.7K	J	1/10W		
R273			RK73GB2A222J	CHIP R 2.2K	J	1/10W		
R274			RK73GB2A102J	CHIP R 1.0K	J	1/10W		
R275			RK73GB2A104J	CHIP R 100K	J	1/10W		
R277,278			RK73GB2A471J	CHIP R 470	J	1/10W		
R279,280			RK73GB2A472J	CHIP R 4.7K	J	1/10W		
R281			RK73GB2A473J	CHIP R 47K	J	1/10W		
R285			RK73GB2A102J	CHIP R 1.0K	J	1/10W		

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ELECTRIC UNIT (X25-966x-xx)

Ref. No.	A g d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A g d	N e w	Parts No.	Description	Desti- nation
R300,301			RK73GB2A472J	CHIP R 4.7K J 1/10W		I04			TDA7560	ANALOGUE IC	
R302			RK73GB2A221J	CHIP R 220 J 1/10W		I05			SI-8050JD	ANALOGUE IC	
R303			RK73GB2A223J	CHIP R 22K J 1/10W		I07			S-80837CNB	MOS-IC	
R305			RK73GB2A432J	CHIP R 4.3K J 1/10W		I08			TC74HC02AF	MOS-IC	
R306			RK73GB2A100J	CHIP R 10 J 1/10W		I12			TDA7479D	ANALOGUE IC	
R307			RK73GB2A622J	CHIP R 6.2K J 1/10W		IC13,14			LB1930M	ANALOGUE IC	
R308			RK73EB2E102J	CHIP R 1.0K J 1/4W	E3	IC15			BR24C01AF-W	ROM IC	
R309-311			RK73EB2E471J	CHIP R 470 J 1/4W	E3	Q1			2SA2057	TRANSISTOR	
R312			RK73EB2E101J	CHIP R 100 J 1/4W		Q2			2SC4081	TRANSISTOR	
R313-317			RK73EB2E472J	CHIP R 4.7K J 1/4W		Q3			2SA1576A	TRANSISTOR	
R318,319			RK73EB2E101J	CHIP R 100 J 1/4W		Q4			DTA124EUA	DIGITAL TRANSISTOR	
R321-323			RK73GB2A222J	CHIP R 2.2K J 1/10W		Q4			UN5112	DIGITAL TRANSISTOR	
R324,325			RK73GB2A472J	CHIP R 4.7K J 1/10W		Q5			DTC124EUA	DIGITAL TRANSISTOR	
R326			RK73GB2A104J	CHIP R 100K J 1/10W		Q5			UN5212	DIGITAL TRANSISTOR	
R327,328			RK73GB2A472J	CHIP R 4.7K J 1/10W		Q6			DTC144EUA	DIGITAL TRANSISTOR	
R329			RK73EB2E472J	CHIP R 4.7K J 1/4W		Q6			UN5213	DIGITAL TRANSISTOR	
R330,331			RK73EB2E101J	CHIP R 100 J 1/4W		Q7			DTA124EUA	DIGITAL TRANSISTOR	
R332			RK73EB2E471J	CHIP R 470 J 1/4W		Q7			UN5112	DIGITAL TRANSISTOR	
R402			RK73FB2B102J	CHIP R 1.0K J 1/8W		Q8,9			2SA2057	TRANSISTOR	
R403			RK73GB2A223J	CHIP R 22K J 1/10W		Q10			2SC4081	TRANSISTOR	
R404			RK73GB2A472J	CHIP R 4.7K J 1/10W	E3	Q11			DTC124EUA	DIGITAL TRANSISTOR	
R405-407			RK73GB2A222J	CHIP R 2.2K J 1/10W	E3	Q11			UN5212	DIGITAL TRANSISTOR	
W1			R92-1252-05	CHIP R 0 OHM J 1/16W	E3	Q12			DTA124EUA	DIGITAL TRANSISTOR	
D1			1N5393G-M5	DIODE		Q12			UN5112	DIGITAL TRANSISTOR	
D2			RB160L-40	DIODE		Q13			2SA2057	TRANSISTOR	
D3			MA4056(N)-M	ZENER DIODE		Q14			2SC4081	DIGITAL TRANSISTOR	
D4			MA4082(N)-L	ZENER DIODE		Q23			DTC114YUA	DIGITAL TRANSISTOR	
D5			SFPB-54V	DIODE		Q23			UN5214	DIGITAL TRANSISTOR	
D6			MA4110-L	ZENER DIODE		Q24,25			2SB1240	TRANSISTOR	
D9-12			S1J	DIODE		Q25			2SB1240	TRANSISTOR	
D9-12			1SR154-400	DIODE		Q26			DTC114YUA	DIGITAL TRANSISTOR	
D13			1SS133	DIODE		Q26			UN5214	DIGITAL TRANSISTOR	
D14			MA4056-M	ZENER DIODE	E3	Q27			2SA1576A	TRANSISTOR	
D15			MA4047-M	ZENER DIODE	E3	Q28			DTA124EUA	DIGITAL TRANSISTOR	
D16			MA4068(N)-M	ZENER DIODE		Q28			UN5112	DIGITAL TRANSISTOR	
D17			MA4062(N)-M	ZENER DIODE		Q29			DTA123JK	DIGITAL TRANSISTOR	
D20			1SS133	DIODE		Q29			KRA105S	DIGITAL TRANSISTOR	
D23,24			DAP202U	DIODE		Q30			DTC144EUA	DIGITAL TRANSISTOR	
D23,24			MA142WA	DIODE		Q30			UN5213	DIGITAL TRANSISTOR	
D25,26			RD6.8M(B2)	ZENER DIODE		Q32-34			2SC4081	TRANSISTOR	
D29-31			1SS133	DIODE		Q51,52			DTA124EUA	DIGITAL TRANSISTOR	
D33-40			S1J	DIODE		Q51,52			UN5112	DIGITAL TRANSISTOR	
D33-40			1SR154-400	DIODE		Q53			DTC143TUA	DIGITAL TRANSISTOR	
D50			RD6.8M(B2)	ZENER DIODE		Q53			UN5216	DIGITAL TRANSISTOR	
D51			RD6.8MW	ZENER DIODE		Q54			DTC124EUA	DIGITAL TRANSISTOR	
D52-55			MA3062WA	ZENER DIODE	E3	Q54			UN5212	DIGITAL TRANSISTOR	
D52,53			MA3062WA	ZENER DIODE	K3	Q55-60			DTC143TUA	DIGITAL TRANSISTOR	
D60			MA3062WA	ZENER DIODE		Q55-60			UN5216	DIGITAL TRANSISTOR	
D62			MA3062WA	ZENER DIODE		Q55,56			DTC143TUA	DIGITAL TRANSISTOR	
D63-65			DA204U	DIODE		Q55,56			UN5216	DIGITAL TRANSISTOR	
D66			IMSA-6801	SURGE ABSORBER		Q59,60			DTC143TUA	DIGITAL TRANSISTOR	
IC1		*	UPD703030GC014	MI-COM IC		Q59,60			UN5216	DIGITAL TRANSISTOR	
IC2		*	TDA7411	ANALOGUE IC		Q63			DTA124EUA	DIGITAL TRANSISTOR	
IC3		*	M5237ML	ANALOGUE IC		Q63			UN5112	DIGITAL TRANSISTOR	
						Q102			DTA124EUA	DIGITAL TRANSISTOR	

E : Europe K : North America
M : Other Areas W : Without EuropeK3 : KDC-MP822
E3 : KDC-M7024

△ Indicates safety critical components.

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ELECTRIC UNIT (X25-966x-xx)

Ref. No.	A d	N e w	Parts No.	Description			Desti- nation
Q102			UN5212	DIGITAL TRANSISTOR			
Q103			2SB1188(Q,R)	TRANSISTOR			
Q104			DTC143TUA	DIGITAL TRANSISTOR			E3
Q104			UN5216	DIGITAL TRANSISTOR			E3
TH1			PTH9C42BD471Q	POSITIVE RESISTOR			
A1		*	X86-3730-11	FRONT-END UNIT			K3
A1		*	X86-3732-70	FRONT-END UNIT			E3

CD PLAYER UNIT (X32-5410-00)

C1			C92-0628-05	CHIP-TAN	10UF	10WV	
C2			CK73FB1A105K	CHIP C	1.0UF	K	
C3			CK73FB1A225K	CHIP C	2.2UF	K	
C4			CK73GB1H103K	CHIP C	0.010UF	K	
C5			CC73GCH1H680J	CHIP C	68PF	J	
C6			CC73GCH1H681J	CHIP C	680PF	J	
C7			CK73GB1H104K	CHIP C	0.10UF	K	
C8			CK73GB1H222K	CHIP C	2200PF	K	
C9,10			CK73GB1H104K	CHIP C	0.10UF	K	
C11			CC73GCH1H681J	CHIP C	680PF	J	
C12			CK73GB1H222K	CHIP C	2200PF	K	
C13			CC73GCH1H680J	CHIP C	68PF	J	
C15			CK73EB1A475K	CHIP C	4.7UF	K	
C16			CK73GB1H104K	CHIP C	0.10UF	K	
C17			CK73GB1H331K	CHIP C	330PF	K	
C18			CK73GB1H472K	CHIP C	4700PF	K	
C19,20			CK73GB1H104K	CHIP C	0.10UF	K	
C21			CK73EB1A475K	CHIP C	4.7UF	K	
C22			CK73GB0J105K	CHIP C	1.0UF	K	
C23			CK73FB1A225K	CHIP C	2.2UF	K	
C26			CK73GB1H104K	CHIP C	0.10UF	K	
C27			C92-0712-05	CHIP-TAN	22UF	6.3WV	
C28			CK73GB1H102K	CHIP C	1000PF	K	
C29			CK73GB1H331K	CHIP C	330PF	K	
C30			CK73GB1H152K	CHIP C	1500PF	K	
C31-35			CK73GB1H104K	CHIP C	0.10UF	K	
C36			C92-0712-05	CHIP-TAN	22UF	6.3WV	
C41			CK73GB1H104K	CHIP C	0.10UF	K	
C42			CK73EB1A475K	CHIP C	4.7UF	K	
C45			CK73GB1H102K	CHIP C	1000PF	K	
C47			C92-0628-05	CHIP-TAN	10UF	10WV	
C48			CK73GB1H104K	CHIP C	0.10UF	K	
C50			CK73GB1H104K	CHIP C	0.10UF	K	
C52			CK73GB1H152K	CHIP C	1500PF	K	
C53			CK73GB1H104K	CHIP C	0.10UF	K	
C55			CC73GCH1H470J	CHIP C	47PF	J	
C56			CC73GCH1H820J	CHIP C	82PF	J	
C57			CK73GB1H104K	CHIP C	0.10UF	K	
C59			CK73GB1H104K	CHIP C	0.10UF	K	
C61			CK73GB1H104K	CHIP C	0.10UF	K	
C63			CC73GCH1H020C	CHIP C	2.0PF	C	
C65			CK73GB1H104K	CHIP C	0.10UF	K	
C67			CK73GB1H222K	CHIP C	2200PF	K	
C68			CC73GCH1H060D	CHIP C	6.0PF	D	
C70			CK73GB1H104K	CHIP C	0.10UF	K	
C74			CK73GB1H682K	CHIP C	6800PF	K	

Ref. No.	A d	N e w	Parts No.	Description			Desti- nation
C75			CK73GB1H332K	CHIP C	3300PF	K	
C76			CK73GB1H103K	CHIP C	0.010UF	K	
C77			CK73GB1H104K	CHIP C	0.10UF	K	
C78			CK73EB1A475K	CHIP C	4.7UF	K	
C79-82			CK73GB1H152K	CHIP C	1500PF	K	
C83			CK73GB1H104K	CHIP C	0.10UF	K	
C84			C92-0628-05	CHIP-TAN	10UF	10WV	
C85			CK73GB1H104K	CHIP C	0.10UF	K	
C87			CK73EB1A475K	CHIP C	4.7UF	K	
C88			CK73GB1H104K	CHIP C	0.10UF	K	
CN1			E41-0213-05	FLAT CABLE CONNECTOR			
CN2			E40-9536-05	FLAT CABLE CONNECTOR			
L1			L92-0329-05	CHIP FERRITE			
L5			L92-0329-05	CHIP FERRITE			
X1			L78-0851-05	RESONATOR (16.93MHZ)			
X2			L78-0862-05	RESONATOR (16.00MHZ)			
CP1,2			R90-1019-05	MULTI-COMP	100	X2	
CP4			R90-0719-05	MULTI-COMP	4.7K	X2	
CP5			R90-0737-05	MULTI-COMP	100K	X2	
CP6			R90-1019-05	MULTI-COMP	100	X2	
CP7			R90-0737-05	MULTI-COMP	100K	X2	
CP13			R90-0720-05	MULTI-COMP	100K	X4	
CP15			R90-0718-05	MULTI-COMP	4.7K	X4	
CP16-22			R90-1014-05	MULTI-COMP	100	X4	
CP23			R90-0714-05	MULTI-COMP	10K	X4	
CP24			R90-0720-05	MULTI-COMP	100K	X4	
R1			R92-3044-05	CHIP R	18K	D	1/10W
R2			R92-3041-05	CHIP R	11K	D	1/10W
R3			RK73FB2B303J	CHIP R	30K	J	1/8W
R4			RK73GB2A222J	CHIP R	2.2K	J	1/10W
R5			RK73FB2B272J	CHIP R	2.7K	J	1/8W
R6			RK73FB2B331J	CHIP R	330	J	1/8W
R7,8			RK73FB2B752J	CHIP R	7.5K	J	1/8W
R9			RK73FB2B272J	CHIP R	2.7K	J	1/8W
R10			RK73FB2B331J	CHIP R	330	J	1/8W
R11			R92-3041-05	CHIP R	11K	D	1/10W
R12			RK73FB2B303J	CHIP R	30K	J	1/8W
R13			R92-3044-05	CHIP R	18K	D	1/10W
R14			RK73GB2A472J	CHIP R	4.7K	J	1/10W
R16			RK73GB2A123J	CHIP R	12K	J	1/10W
R17			RK73GB2A133J	CHIP R	13K	J	1/10W
R18			RK73GB2A472J	CHIP R	4.7K	J	1/10W
R19,20			RK73GB2A123J	CHIP R	12K	J	1/10W
R21			RK73GB2A432J	CHIP R	4.3K	J	1/10W
R22			RK73GB2A133J	CHIP R	13K	J	1/10W
R23,24			RK73GB2A104J	CHIP R	100K	J	1/10W
R25			RK73GB2A102J	CHIP R	1.0K	J	1/10W
R26			RK73GB2A104J	CHIP R	100K	J	1/10W
R27			RK73GB2A102J	CHIP R	1.0K	J	1/10W
R28			RK73GB2A103J	CHIP R	10K	J	1/10W
R29			RK73GB2A133J	CHIP R	13K	J	1/10W
R30			RK73GB2A102J	CHIP R	1.0K	J	1/10W
R31			RK73GB2A472J	CHIP R	4.7K	J	1/10W
R32			RK73GB2A103J	CHIP R	10K	J	1/10W

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CD PLAYER UNIT (X32-5410-00)

Ref. No.	A d	N e w	Parts No.	Description				Desti- nation	Ref. No.	A d	N e w	Parts No.	Description				Desti- nation
R33			RK73GB2A104J	CHIP R	100K	J	1/10W		15	2A		D10-4586-13	SLIDER				
R34			RK73GB2A183J	CHIP R	18K	J	1/10W		16	3B		D10-4587-22	SLIDER				
R35			RK73GB2A102J	CHIP R	1.0K	J	1/10W		17	3B		D10-4588-13	SLIDER				
R36			RK73GB2A163J	CHIP R	16K	J	1/10W		18	3B		D10-4595-04	ARM				
R38			RK73GB2A104J	CHIP R	100K	J	1/10W		19	3B		D10-4596-14	ARM				
R39-41			RK73GB2A103J	CHIP R	10K	J	1/10W		22	2A		D13-2151-04	GEAR				
R42,43			RK73GB2A104J	CHIP R	100K	J	1/10W		23	2B		D13-2152-04	GEAR				
R46			RK73GB2A4R7J	CHIP R	4.7	J	1/10W		24	3B		D13-2153-04	GEAR				
R47			RK73GB2A104J	CHIP R	100K	J	1/10W		25	3B		D13-2154-04	GEAR				
R49			RK73GB2A104J	CHIP R	100K	J	1/10W		26	3B		D13-2155-04	WORM				
R50			RK73GB2A102J	CHIP R	1.0K	J	1/10W		27	3B		D13-2156-14	GEAR				
R51			RK73GB2A103J	CHIP R	10K	J	1/10W		28	3B		D13-2157-04	GEAR				
R52			RK73GB2A104J	CHIP R	100K	J	1/10W		29	3B		D13-2158-04	GEAR				
R53			RK73GB2A473J	CHIP R	47K	J	1/10W		30	3B		D13-2168-04	GEAR				
R55			RK73GB2A103J	CHIP R	10K	J	1/10W		31	3B		D13-2171-04	GEAR				
R57			RK73GB2A472J	CHIP R	4.7K	J	1/10W		32	2B		D13-2172-03	RACK (GEAR)				
R59			RK73GB2A164J	CHIP R	160K	J	1/10W		33	2A		D14-0759-04	ROLLER				
R62,63			RK73GB2A302J	CHIP R	3.0K	J	1/10W		35	2B		D21-2382-04	SHAFT				
R67			RK73GB2A682J	CHIP R	6.8K	J	1/10W		36	1A		D23-0954-04	RETAINER				
R69			RK73GB2A333J	CHIP R	33K	J	1/10W		37	1B		D39-0246-05	DAMPER				
R70			RK73GB2A103J	CHIP R	10K	J	1/10W		38	2B		G01-3072-04	EXTENSION SPRING				
R71,72			RK73GB2A101J	CHIP R	100	J	1/10W		39	2A		G01-3073-04	TORSION COIL SPRING				
R73			RK73GB2A241J	CHIP R	240	J	1/10W		40	2A		G01-3074-04	EXTENSION SPRING				
R75			RK73GB2A103J	CHIP R	10K	J	1/10W		41	1B		G01-3075-04	EXTENSION SPRING				
R76			RK73GB2A101J	CHIP R	100	J	1/10W		42	2A		G01-3076-04	EXTENSION SPRING				
R77			RK73GB2A102J	CHIP R	1.0K	J	1/10W		43	1B		G01-3077-04	EXTENSION SPRING				
R78			RK73GB2A104J	CHIP R	100K	J	1/10W		44	2B		G02-1399-04	FLAT SPRING				
W1			R92-1252-05	CHIP R	0 OHM	J	1/16W		45	2B		G02-1408-04	FLAT SPRING				
S1,2			S68-0863-05	PUSH SWITCH					51	1A		J21-9676-22	MOUNTING HARDWARE				
S3			S68-0862-05	PUSH SWITCH					52	3B		J21-9677-02	MOUNTING HARDWARE				
D1			DAP202U	DIODE					53	1B		J21-9678-03	MOUNTING HARDWARE				
IC1			TAR5S33	ANALOGUE IC					55	1A		J90-1001-11	GUIDE				
IC2			NJM4580V	ANALOGUE IC					56	1B		J90-1023-03	GUIDE				
IC4			BA5824FP	ANALOGUE IC					A	2B		N09-4460-05	TAPTRITE SCREW (OVAL P TAPTRIT)				
IC6			L88MS33T	ANALOGUE IC					B	1B		N09-4472-05	MACHINE SCREW (M1.7X8.5)				
IC7			703033BYGC-J02	MI-COM IC					C	2B		N09-6004-05	MACHINE SCREW (M1.7X2.5 IB-L)				
IC8			TC74HCT7007AF	MOS-IC					E	2B		N09-6007-05	MACHINE SCREW (PAN M2X2)				
IC11			UPD63760GJ	MOS-IC					F	1A		N09-6051-05	TAPTRITE SCREW (BIND P 2X5)				
IC13			IS41LV16257	DRAM IC					G	2A		N19-2163-04	FLAT WASHER				
IC13			MSM51V4265EP70	DRAM IC					H	1B		N39-2020-46	PAN HEAD MACHIN SCREW				
Q1			DTA143XUA	DIGITAL TRANSISTOR					J	1B		N09-6108-05	MACHINE SCREW (M2*3.5TYPE3)				
Q2,3			DTC124EUA	DIGITAL TRANSISTOR					DM1	3B		T42-1066-04	DC MOTOR ASSY (SP)				
Q4			MCH6101	TRANSISTOR					DM2	2B		T42-1067-04	DC MOTOR ASSY (LO)				
Q5			DTA143EUA	DIGITAL TRANSISTOR					DPU1	2D		X93-2010-00	OPTICAL PICKUP ASSY				
CD MECHANISM ASSY (X92-4670-01)																	
2	1B		A10-4827-12	CHASSIS													
5	1B		D10-4576-43	ARM ASSY													
8	2A		D10-4579-03	LEVER ASSY													
10	3A		D10-4581-13	ARM													
11	2A		D10-4582-13	ARM													
12	3A		D10-4583-03	ARM													
13	3A		D10-4584-03	ARM													
14	3B		D10-4585-03	ARM													

KDC-M7024/MP822

SPECIFICATIONS

		KDC-M7024	KDC-MP822
FM	Frequency Range (Frequency step)	87.5MHz~108.0MHz (50kHz)	87.9MHz~107.9MHz (200kHz)
	Channel Space Selection	-	50kHz/200kHz
	Usable Sensitivity (S/N 26dB)	0.7μV/75Ω	-
	Usable Sensitivity (S/N 30dB)	-	9.3dBf (0.8μV/75Ω)
	Quieting Sensitivity (S/N 46dB)	1.6μV/75Ω	-
	Quieting Sensitivity (S/N 50dB)	-	15.2dBf (1.6μV/75Ω)
	Frequency Response (±3.0dB)	30Hz~15kHz	30Hz~15kHz
	S/N	65dB (MONO)	70dB (MONO)
	Selectivity (DIN)	≥ 80dB (±400kHz)	-
	Selectivity	-	≥ 80dB (±400kHz)
	Stereo Separation	35dB (1kHz)	40dB (1kHz)
AM (MW)	Frequency Range (Frequency step)	531kHz~1611kHz (9kHz)	530kHz~1700kHz (10kHz)
	Channel Space Selection	-	9kHz/10kHz
	Usable Sensitivity (S/N 20dB)	25μV	28dBμ (25μV)
LW	Frequency Range	153kHz~281kHz	-
	Usable Sensitivity (S/N 20dB)	45μV	-
CD	Laser Diode	GaAlAs (λ=780nm)	GaAlAs (λ=780nm)
	Digital Filter (D/A)	8 Times Over Sampling	8 Times Over Sampling
	D/A Converter	1 Bit	1 Bit
	Spindle Speed (CD-DA) (MP3)	1000~400rpm (CLV. 2 times)	1000~400rpm (CLV. 2 times)
	Wow & Flutter	Below Measurable Limit	Below Measurable Limit
	Frequency Response	10Hz~20kHz (±1dB)	10Hz~20kHz (±1dB)
	Total Harmonic Distortion	0.01% (1kHz)	0.01% (1kHz)
	S/N Ratio	105dB (1kHz)	105dB (1kHz)
	Dynamic Range	93dB	93dB
	Channel Separation	95dB	95dB
	MP3 Decode	Compliant with MPEG-1.0/2.0/2.5 Audio Layer-3	Compliant with MPEG-1.0/2.0/2.5 Audio Layer-3
Preout Level/Load (Unbalanced)		2000mV/10kΩ (CD/CD-CH)	2000mV/10kΩ (CD/CD-CH)
Preout Impedance		≤ 600Ω	≤ 600Ω
Amplifier	Maximum Power	50Wx4	50Wx4
	Full Bandwidth Power (at less than 1% THD)	-	22Wx4
	PWR DIN45324, +B=14.4V	30Wx4	-
Tone	Bass	100Hz±10dB	100Hz±10dB
	Middle	1kHz±10dB	1kHz±10dB
	Treble	10kHz±10dB	10kHz±10dB
General	Operating Voltage (11V~16V allowable)	14.4V	14.4V
	Current Consumption	10A	10A
	Installation Size (WxHxD)	178x50x165 (mm)	178x50x165 (mm) 7x1-15/16x6-1/2 (in)
	Weight	1.70kg	3.75lbs (1.70kg)

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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